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ABSTRACT

The literature was surveyed and discussions were conducted with various federal officials, state administrators, and private employers to evaluate private employers' policies with regard to disabled persons. Key employment programs for disabled workers were reviewed, including the Employment Services System (Job Service), the Comprehensive Employment and Training Act, Title III--Special Projects, Sheltered Workshops, additional demonstration efforts funded by the Department of Labor, private sector initiatives for disabled persons, and services by the Rehabilitation Services Administration of the Department of Education. These programs and projects indirectly addressed the need to work closely with private employers to eliminate stereotypes of the abilities of disabled workers and to identify processes to facilitate job placement. Four specific barriers to employment faced by handicapped individuals were explored: job modification, employer hiring practices, productivity concerns, and fringe benefit packages. (Following a 10-page bibliography is a review of British research literature regarding employment problems of physically disabled people.) (YLB)

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POLICIES OF PRIVATE EMPLOYERS
TOWARD THE DISABLED
A REVIEW OF CURRENT PROGRAMS
AND RELEVANT LITERATURE

February, 1980

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INTRODUCTION

Government interest in undertaking an extended evaluation of the policies of private employers with regard to the disabled is long overdue. While a number of programs have been initiated to facilitate the active participation of handicapped individuals in the labor force, these efforts have been generally small in scale and have sought to correct specific, pre-determined barriers to the employment of the handicapped. None have emerged as a policy solution identified as a result of extended research on the topic. For example, there has been little empirical analysis of the relative productivity of the disabled since the massive Department of Labor studies in 1948.[1] Similarly, few research efforts have been mounted that address the prevailing attitudes of employers toward hiring the disabled; the disincentives to hiring the handicapped found in fringe benefit packages; or the need and realistic costs associated with various job modification schemes designed to facilitate the hiring of the disabled. In October 1979, the Office of the Assistant Secretary for Planning and Evaluation (ASPE), Department of Health and Human Services, contracted with Berkeley Planning Associates to conduct an extended review of the current policies of private employers with regard to the disabled and to develop a detailed evaluation and study design for further research in this area. Specifically, the study is to focus on the following four key policy questions:

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[1] U.S. Department of Labor, The Performance of Physically Impaired Workers in Manufacturing Industries (1948).

- Are the disabled more, less, or as productive as other non-disabled workers when given the chance to take a given job?
- Are employers less willing to hire the disabled because of perceived greater costs, customer reaction, personal prejudice, the reaction of fellow workers, union rules limiting job flexibility, or other reasons unrelated to the individual's ability to perform on the job?
- What kinds of job modifications, if any, are private employers willing to undertake for the disabled, and what are the obstacles to increased numbers and types of job modifications?
- What fringe benefits are available to disabled workers, do these benefits result in higher employer cost, and how fringe benefits influence the employment decisions of employers and disabled workers?

During the past decade, the disabled have finally achieved a place in the general public consciousness akin to that held by other minority groups. The efforts of advocates for the disabled as well as efforts of the disabled themselves have produced a greater visability for the employment problems, access problems, and income maintenance needs faced by the estimated 12 million handicapped individuals in this country. Federal legislation, particularly the Rehabilitation Act of 1973 and its wide-reaching Section 504, and the 1978 amendments to the Comprehensive Employment and Training Act (CETA), have clearly articulated the rights of the disabled to full participation in all aspects of social and economic life. In staking their claim to full citizenship, the disabled and their advocates have raised a number of controversial issues such as the rising disability pension expenses both within the Social Security program and in state and local employees' pension programs, the inaccessibility of public transportation, and inadequacies of the nation's Vocational Rehabilitation system, long considered to be a model human services program. Some advocates of the disabled stress that it is time that the capabilities of even the most severely disabled to be productive citizens be recognized and that the private, as well as the public, sector open the doors to meaningful employment. Other more pragmatic, but not necessarily less compassionate, advocates simply argue that since the disabled cost so much to support, the society and the taxpayers have a selfish interest in trying to get this group of individuals into the labor force, thereby reducing their dependency on public benefit programs.

Critics of these types of rehabilitation efforts, however, do exist and are becoming increasingly evident. Such critics charge that the severely disabled are, for the most part, unemployable and that efforts to train them will never result in them obtaining a profitable level of productivity. As the country's general unemployment rate rises and the rate of economic growth falls, such critics further argue that tax dollars are poorly spent in rehabilitating the severely disabled who, when trained, will simply be taking jobs presently held by non-disabled, often disadvantaged, workers. While the critics concede that certain, less severe, disabilities can be overcome with relatively minor training or job modifications, they argue that such mild impairments do not deserve a unique public policy response. Since the disabled who have employment problems have those problems mostly because of their other attributes, such as education, age, sex, or race, the critics argue that disability itself poses few handicaps for employment.

The proposed study seeks to establish a more solid foundation on which to further define this debate and to develop future policies and programs dealing with the employment and employability of the disabled. The purpose of this document is to summarize the findings from our initial survey of the literature and our discussions with various federal officials, state administrators, and private employers currently struggling with this issue. Beginning on a positive note, Section I reviews the extent to which disabled individuals are included in the labor force and reviews a number of public and private programs that enhance the position of the disabled in regards to employment. Section II carefully looks at the specific barriers to employment faced by the handicapped and focuses on the four key areas that the government has cited as playing the most significant role. These areas include job modification, employer hiring practices, productivity concerns, and fringe benefit packages. The final section summarizes the prevailing trends noted in the literature and articulated by those currently involved in setting program priorities in this area and outlines the key policy questions that the remainder of the study will address. A complete list of the resources reviewed and the individuals contacted are included in appendixes to this document.

I. EMPLOYMENT PROGRAMS FOR THE DISABLED

Over the past several years, various government programs and private initiatives have emerged that directly address the issue of employment for the disabled. The level of effort and size of these government endeavors range from relatively minor (i.e., under $50,000) research grants and demonstration programs, to sizable allocations of the Comprehensive and Employment Training Act (CETA) monies to programs specifically aimed at serving the disabled, to the country's massive Vocational Rehabilitation program. Similarly, private efforts can be found among the nation's biggest companies and union organizations as well as among small firms and individual local unions. In order to better understand the position of the handicapped within the current labor market, a number of Department of Labor initiatives, the Projects with Industry program funded by the Rehabilitation Services Administration and various private efforts were reviewed. Also, the numerous programs supported under the rubric of the nation's Vocational Rehabilitation Plan were examined for their relevance to the current study. The following summaries provide brief descriptions of several of these key programs, citing the accomplishments and limitations of each as they relate to the specific employment problems faced by the handicapped.

EMPLOYMENT SERVICES SYSTEM

The public employment service, now called the Job Service in most states, dates from the Wagner-Peyser Act of 1933. This Depression-era measure required that all state public employment services provide assistance to disabled veterans. This emphasis on those with disabilities was broadened to include all handicapped individuals in the Rehabilitation Act of 1954. At this time, each Job Service office was required to have a "designated person" to be responsible for coordinating services to those with disabilities. The role of the Job Services in aggressively seeking employment opportunities for the disabled was further articulated in the Vocational Rehabilitation Acts of 1973 and 1974. Despite this growing emphasis on serving the handicapped, the actual number of disabled seeking assistance from state and local Job Service offices has decreased in recent years. According to Doris Woolley, Handicapped Employment Specialist with DOL's Employment and Training Administration, the Job Service offices report serving roughly 800,000 handicapped individuals compared to the one million handicapped individuals seen in the early 1970s.[1]

The philosophy of the Job Services in locating employment opportunities for the disabled is that of focusing on the particular capabilities of each individual applicant. "All job seekers, whether regarded as handicapped or not, bring to the world of work a mix of abilities and limitations. The process of placement is one of matching the applicant -- considering education, training, employment, history and interests -- to the requirements of the job."[2] Depsite this common approach to the placement of all applicants, both handicapped and non-handicapped, the Job Services' workers are provided specific operating manuals that highlight certain key procedures one should follow in placing a disabled applicant or in seeking to develop a broader range of job opportunities for the disabled.[1] For example, in seeking to increase the range and number of jobs considered available to the disabled, the employment counselor is encouraged to observe the following steps:[2]

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[1] Interview with Doris Woolley, December 5, 1979.

[2] U.S. Department of Labor, Employment and Training Administration, Placing Handicapped Applicants: An Employment Service Handbook, Washington, D.C.: U.S. Government Printing Office, p. 1.

1. Determine the local employer and employment situation:
    - work with the employer to identify job development opportunities;
    - expand the search beyond the usual placement opportunities, reaching out to employers who have not routinely listed job openings with the public employment service;
    - sell job development programs on the basis of the advantage to the employer (i.e., increased efficiency, greater productivity);
    - target outreach activities to those individuals responsible for company management and policy decisions; and
    - obtain the support of local labor unions.
2. Identify those situations within the community that might result in job development opportunities:
    - take advantage of community characteristics that contribute to job development potential (i.e., new growth in a particular segment of the labor force);
    - take advantage of situations where manpower is in demand;
    - look for situations where intuition or evidence indicate good potential for job development; and

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[1] See Placing Handicapped Applicants: An Employment Service Handbook and Job Counseling and Placement for the Use of Basic Skills, both distributed by DOL's Employment and Training Administration. In addition, specialized manuals have been developed for a number of specifid disabilities such as mental retardation, cerebral palsy, visual impairments and orthopedic disabilities.

[2] Placing Handicapped Applicants, op. cit., pp. 62-89.

- identify discontinuities between employment and job requirements (i.e., does the employer have an inflated view of the skills necessary to adequately do the job in question).

3. Make use of existing work simplification capabilities and programs:
   - consider reviewing a company's job structure with the employer;
   - consider redesigning certain jobs to reduce the specific performance requirements;
   - consider redesigning certain jobs to take advantage of technical advances; and
   - review existing simplified work concepts with the employer.
4. Make use of job analysis techniques for job restructuring.
5. Define job requirements for newly defined positions:
   - identify new job performance requirements;
   - identify supervisory, team, work group, and specification capabilities; and
   - differentiate learning factors from performance factors.
6. Follow-up on newly defined job referrals:
   - support both the client and employer through the initial adjustment stage; and
   - extend job development activities by building on the initial success into other aspects of the company's labor force.

While these steps might well be pursued in the development of job opportunities for all types of hard-to-employ individuals (i.e., welfare recipients, youth, older workers, etc.), they are particularly relevant to the placement of the disabled. First, they require an initial assessment of the existing job market and the attitudes of local employers toward hiring the disabled and an initial effort to explain the advantages of job development activities to the employer. The approach taken is not one of promoting a social good or preaching about one's responsibility to the disabled; rather the approach is one of furthering the goals of the private employer, namely achieving a more efficient utilization of the labor force and perhaps increasing productivity. Second, the approach stresses identifying those skills necessary to perform a particular task rather than accepting the current, listed job requirements. One difficulty repeatedly cited by employment counselors is that employers tend to inflate the requirements for a job, a process that can result in an overqualified individual being placed in a job that might soon bore them and a seemingly unqualified individual being barred from employment. This approach has been found to be particularly useful in expanding job opportunities for the mentally retarded, who often can perform a highly structured and routine job but are barred from trying due to certain unnecessary job qualifications cited by the employer. Finally, the emphasis on follow-up indicates that the placement process does not end at the point in which the individual accepts a job. Because not all consequences can be anticipated, regardless of the level of planning undertaken, continuous, ongoing contact with both the employer and the client following the actual placement not only can serve to identify emerging, unanticipated problems, but also can provide useful feedback, which can then be incorporated into refining and improving future programs.

The success of the public employment services in placing disabled individuals into jobs appears, at first glance, to be similar to the agency's overall placement success experienced with its total client population. As indicated in Table 1, roughly 30% of both handicapped and non-handicapped clients were placed in jobs by local Job Service offices in FY 1978. Handicapped clients, however, do require a greater expenditure of staff time than the general client population. While handicapped clients represent 5.5% of the total client population, they represent 16% of those clients receiving counseling services and 18% of those clients receiving testing services. The Job Service placement figures tend to support those studies that have consistently shown that disability accounts at most for only a relatively small proportion of the

Table 1

Placement Rates for the General and Disabled Client Population of Job Service Offices for FY 1978

	General Population	Disabled Population
Number of clients registered	15.5 million	845,000
Number of clients provided special counseling services	1 million	157,000[b]
Number of clients provided special testing services	762,000	43,000[b]
Number of clients placed into jobs	4.6 million	232,000
Placement rate[a]	30%	27%

[a] The 1978 placement rate figures represented a 12% increase over the previous year for both the general client population as well as the disabled client population.

[b] A higher concentration of disabled clients is found in these two categories in comparison to the relationship of this group to the total client population. The disabled population represents 16% of the clients receiving counseling services and 18% of the clients receiving testing services. Disabled clients represent only 5.5% of the total client population.

Source: Employment and Training Report of the President -- Reported by the U.S. Department of Labor and the U.S. Department of Health, Education and Welfare, 1979, p. 66.

lower incomes that many disabled people -- particularly those who are the concern of social policy -- experience. The unemployment and low incomes of many disabled are due less to discrimination by the employer based on disability, than to compounding socioeconomic handicaps that may make a given disabled person less attractive to an employer. A 1966 study using Social Security data found that functional limitations alone explained only 13% of the variance in severe disability among disabled males and 8% among females.[1] A study of 1970 Census data found that, among the partially disabled, disability was not a major barrier to employment.[2] While this may in fact be the case, the placement rates for the disabled by local Job Services does not differentiate by the type of severity of the disability. The question such generalized statistics cannot address is whether or not the more severely disabled are as successful in obtaining jobs through public employment services as the less severely disabled or the general population. Because the statistics maintained on Job Service clients do not articulate the type or severity of the disability, answers to this question are generally based on the experience and bias of the respondent..

Similarly, an initial review of Department of Labor statistics do not reveal whether or not the average starting wage paid to handicapped individuals placed through Job Services differs from that paid to the non-disabled client. The average wage received by all workers placed in jobs during Fiscal Year 1978 was $3.35 an hour, a 9% increase over the 1977 average figure. While this increase was slightly influenced by the rise of 35¢ per hour in the minimum wage, the proportion of placement at $5 or more per hour increased to 8%, two percentage points higher than the previous year. Graph A illustrates the distribution in wages paid among

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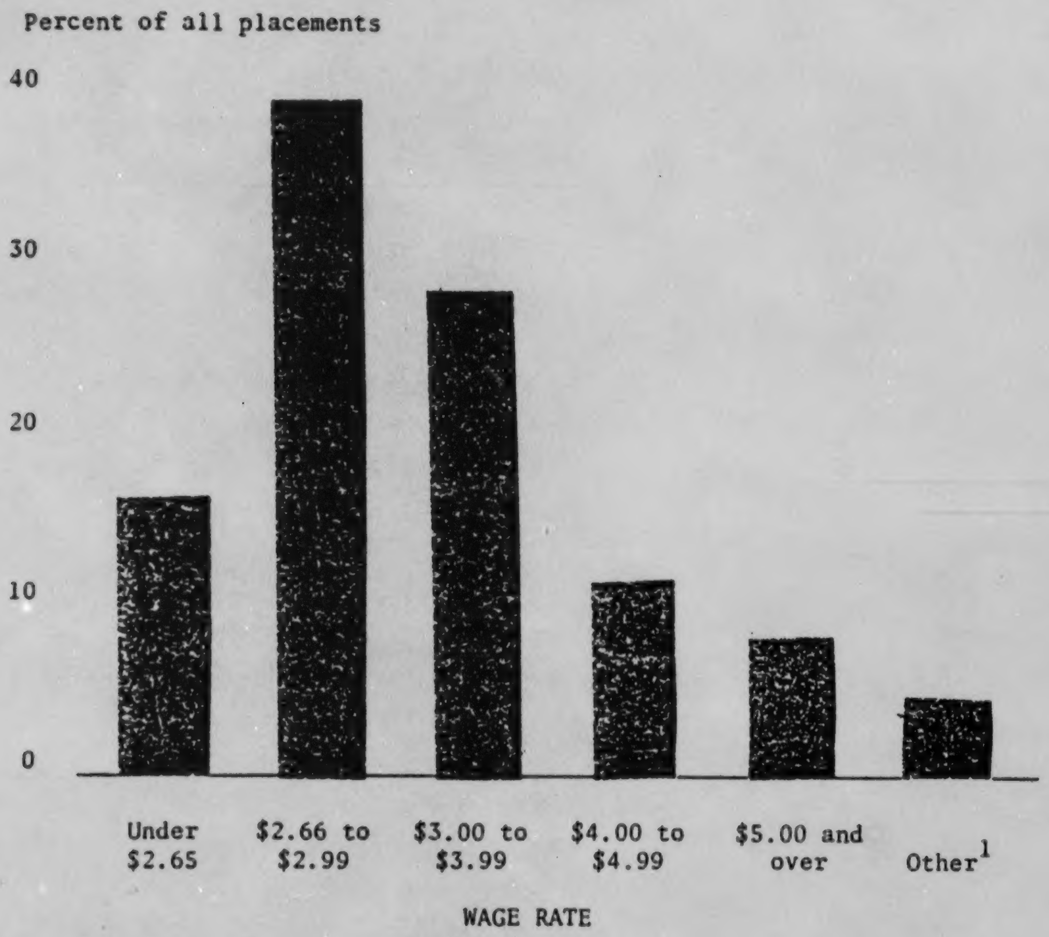
[1] Lawrence D. Haber, "Disabling Effects of Chronic Disease and Impairment -- II. Functional Capacity Limitations," Journal of Chronic Disability (1973).

[2] David M. O'Neal, Discrimination against Handicapped Persons: The Costs, Benefits, and Inflationary Impact of Implementing Section 504 of the Rehabilitation Act of 1973 Covering Recipients of HEW Financial Assistance, (Arlington, VA: Public Research Institute, Report to the Office of Civil Rights, February 18, 1976), Pp. A. 6-7.

Graph A

Average Starting Salaries for Positions Filled by Job Services in FY 1978



[1] Includes payments made to individuals placed in all openings without equivalent hourly wage rates, such as wages derived from commissions or tips.

Source: Employment and Training Report of the President. Reported by the U.S. Department of Labor and the U.S. Department of Health, Education, and Welfare, 1974, p. 64.

all Job Service placements. Again, without knowing the specific severity of the disabilities among Job Service clients, it is not possible to determine if handicapped clients are routinely placed in lower paying jobs.

COMPREHENSIVE EMPLOYMENT AND TRAINING ACT (CETA)

The principal aim of the Comprehensive Employment and Training Act (CETA) is to provide job training and employment opportunities for economically disadvantaged, unemployed, and underemployed persons to enable them to secure self-sustaining, unsubsidized employment. While the CETA program has always been conceptually sensitive to the special needs of various target populations such as the handicapped, the 1978 amendments to the Act place a high priority on developing special programs for these groups and specifically identifies handicapped individuals as also being "economically disadvantaged,"[1] removing them from the income considerations placed on the non-disabled population. Therefore any handicapped person will qualify for CETA participation as long as he or she meets the other specific requirements for a given Title. Coupled with the growing public awareness of the special needs of the disabled, the 1978 amendments are expected to increase the participation of the disabled in CETA Title I and Title II programs. While the specific impacts which Section 504 will have on the policies and practices of the 460 CETA Prime Sponsors have not yet been formally determined, upcoming regulations are expected to require that Prime Sponsors conduct an assessment of the extent and characteristics of the local handicapped population;

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[1] Federal Register 44:65 (April 3, 1979) p. 19998.

determine the specific training needs of these individuals; and provide a range of suitable training opportunities to meet these needs. While it is not clear that all agencies contracted by the Prime Sponsors will need to be accessible to the disabled, the specific type of training offered by any non-accessible grantee will have to be available through a program that is accessible.[1]

Initial findings on the postprogram employment and earnings of CETA participants indicate that CETA participants do experience more frequent employment and higher earnings than they had prior to enrollment.[2] While such findings are, at this point, tentative and subject to a further verification and refinement, Tables 2 and 3 illustrate that both the rate of employment and the level of earnings for CETA program participants increase steadily following termination. For example, for those who entered a CETA program between January and June 1975, 52% were employed with an average hourly wage of $3.20 one month following termination and 58% were employed with an hourly wage of $3.54 one year after termination. In transmitting this information to Congress, DOL added that the overall gains listed in these tables mask major differences between participants

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[1] Information provided during an interview with Hugh Davies, CETA Regulations, the Department of Labor, October 30, 1979.

[2] Continuous Longitudinal Manpower Survey, Follow-up Report No. 1 (18 Months after Entry), Post-Program Experience and Pre-Post Comparisons for Terminees Who Entered CETA in January-June 1975 and Continuous Longitudinal Manpower Survey Follow-Up Report No. 2 (18 Months after Entry), Post-Program Experience and Pre-Post Comparisons for Terminees Who Entered CETA During Fiscal Year 1976 (July 1975-June 1976). Prepared by Westat, Inc., for the U.S. Department of Labor, Employment and Training Administration, Office of Program Evaluation, July 1978 and March 1979. Note that the findings are limited to early postprogram experience (3 months to a year after participation); do not include data on those still in the program 18 months after entry; and do not include comparison group data necessary for any net impact assessment. For these and other reasons, the data should be regarded as only a first general indication of how CETA participants make out after termination.

Table 2

Distribution of Terminees Out at Least 12 Months by Terminee Group and by Labor Force Status at Selected Time Points

(Percent)

Time point	Terminee group and labor Force Status					
	Entered January-June 1975[1]			Entered July-June 1976[2]		
	Employed	Un-employed	Not in labor force[2]	Employed	Un-employed	Not in labor force[3]
Prior to entry:						
12 months	51	20	29	43	26	31
9 months	52	21	27	42	28	30
6 months	48	25	27	38	33	29
3 months	38	35	27	33	40	27
1 month	27	46	27	24	48	26
After termination:						
1 month	52	27	21	50	28	22
3 months	53	25	22	53	26	22
6 months	53	24	23	55	24	21
9 months	56	21	22	58	22	20
12 months	58	22	20	60	21	19

[1] Estimates for 193,500 terminees out at least 12 months.

[2] Estimates for 251,000 terminees out at least 12 months.

[3] Persons in school or another training program, in an institution, or not seeking work because of family responsibilities or ill health or for other reasons.

Source: C[illegible]MS Follow-Up Report No. 2, pp. 6-73 and app D, tables 42 and 43. Employment and Training Report of the President, p. 36.

Note: Detail may not add to 100 percent because of rounding.

Table 3

Average Hourly Wage of Terminees Employed at Any Time by Selected Time Periods

Time periods	Entered January-June 1975		Entered July-June 1976	
	Employed at any time		Employed at any time	
	Estimated number	Average hourly wage	Estimated number	Average hourly wage
Prior to entry				
12 to 10 months	118,000	$3.19	131,300	$3.18
9 to 7 months	123,100	3.27	128,200	3.14
6 to 4 months	115,000	3.25	120,000	3.09
3 to 1 months	95,300	3.10	110,000	3.10
After termination				
1 to 3 months	144,100	3.20	185,500	3.30
4 to 6 months	137,200	3.41	176,300	3.51
7 to 9 months	134,000	3.54	175,800	3.63
10 to 12 months	137,200	3.54	176,400	3.77

Source: CLMS Follow-Up Report No. 2, app. D, tables 44 and 74. Employment and Training Report of the President, p. 37.

who had stable employment backgrounds and those who had histories of limited employment.

> Participants with relatively good employment and earnings the year before entering CETA achieved a good level after the program too. However, they did not regain their preprogram level of employment and earnings, and the average gain for all terminees suffered as a result. On the other hand, those with a lower level of employment and earnings before enrolling in CETA achieved a modest average level after the program, which represented a very considerable gain over their preprogram experience and a greater gain than the average for all terminees.[1]

This finding is of particular interest for potential handicapped CETA clients, who, in many instances, will lack an extensive history of employment.

Increased emphasis on the handicapped by CETA Prime Sponsors may not, however, result in greater job possibilities within the private sector. To date, the experience of CETA trainees moving in private sector employment has been limited. The Conference Board in New York City conducted a study for the Department of Labor in 1978[2] that explored the attitudes of private employers toward CETA program participants and documents the extent to which a sample of nine CETA Prime Sponsors involved private employers in their training and job placement programs. The study found that ". . . many employers have reservations about hiring CETA graduates based on real or assumed shortcomings of the training programs, as well as administrative constraints that employers feel they might encounter."[3]

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[1] U. S. Departments of Labor and Health, Education and Welfare, Employment and Training Report of the President, 1979, pp. 37-38.

[2] Leonard A. Lecht, Marc A. Matland, Involving Private Employers in Local CETA Programs: A CETA Model (New York City: The Conference Board). Report prepared for the Department of Labor, Employment and Training Administration, October, 1978.

[3] Ibid., p. 1.

The Prime Sponsor characteristics and practices, which The Conference Board determined most enhanced the productive involvement of the private sector in CETA activities include:[1]

- Sensitivity to Employers' Needs
  - -- an effort to minimize the amount of "red tape" involved in working with CETA trainees or CETA referrals;
  - -- an awareness of local labor market considerations and needs; and
  - -- an effort to tailor training programs to comply with local industry's labor needs.
- Innovations in Job Development
  - -- an active program to explore new avenues of job developers such as unions, trade associations, etc.
- Active Linkages with Business Organizations
  - -- representation of the Prime Sponsor in local economic development organizations; and
  - -- contractual arrangements with business groups such as the Chamber of Commerce or NAB to provide training services.

With the passage of CETA Title VII, (Private Sector Opportunities for the Economically Disadvantaged), this type of close association with the private sector has been made a formal requirement for all Prime Sponsors. Title VII provides funds to Prime Sponsors for the establishment of

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[1] Leonard A. Lecht, Marc A. Matland, Involving Private Employers in Local CETA Programs: A CETA Model (New York City: The Conference Board). Report prepared for the Department of Labor, Employment and Training Administration, October, 1978, Executive Summary.

Private Industry Councils (PIC), a majority of whose members must be from the local business community.[1] These councils are to participate with the Prime Sponsor in the development of private sector opportunities for economically disadvantaged persons, which include handicapped individuals. The demonstration phase of the program showed that Prime Sponsors and local business representatives could develop a variety of approaches to securing business participation, an experience that proved helpful in preparing for the full implementation of Title VII under all Prime Sponsors in FY 1979.[2] In addition, a comprehensive marketing strategy designed to identify and reach private employers evolved during the development phase of the program. While the specific impact Private Industry Councils will have on the overall employment picture of the handicapped is not yet known, the concept of working closely with the private sector has been a major thrust of the Special Projects for the Handicapped funded under CETA Title III for a number of years. As will be discussed shortly, the involvement of the private sector in developing greater job opportunities for the disabled has proved extremely fruitful.

As previously mentioned, a special concern for the disabled has always existed in the CETA legislation. Not only are the handicapped cited as a special target population under Titles I and II, special programs for the handicapped have been established through the National

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[1] Federal Register 44:65 (April 3, 1979) p. 20049.

[2] U.S. Departments of Labor and Health, Education and Welfare, Employment and Training Report of the President, 1979, p. 47.

Program for Selected Population Segments (NPSPS). In FY 1977, $20 million was allocated to 82 CETA Prime Sponsors "to provide employment and training services to members of a number of special population segments . . . to allow these individuals to compete more effectively in the labor market."[1] Twenty-one of the 82 grantees established programs for the handicapped, with the remaining grantees serving such special populations as women, older workers, rural residents, ex-offenders, and youth. Among those Prime Sponsors serving handicapped clients operating specific programs for the disabled, vocational assessment was perceived as a key problem. These projects indicated that in the past too much emphasis had been given to what the handicapped client potentially could not do rather than what specific skills and jobs the client could do, thereby steering handicapped clients into a narrow range of job opportunities. The NPSPS projects adopted a "can do" philosophy, and generally worked closely with the local private employers in identifying the key areas of economic growth and in providing on-the-job training, work experience, or classroom training to their handicapped clients in order to better prepare them for existing jobs. The need to elicit the early and ongoing cooperation of the private sector in developing new job opportunities was repeatedly stressed by a number of the grantees during an evaluation of the program. When asked to cite the factors most critical in successfully replicating their programs, grantees provided the following responses:[2]

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[1] Abt Associates, National Programs for Selected Population Segments: Project Summaries, Report prepared for the Department of Labor, Employment and Training Administration, July, 1977, p. 1

[2] Ibid., pp. 47-65.

- Program for Mentally and Physically Handicapped
  Somerset County, New Jersey:

  "Projects working with the handicapped required excellent job developers who can create attitude changes among potential employers."

- Project Share, Trico Consortium
  Racine, Wisconsin:

  The most critical factor: early involvement of employers in the training process and presence of job site developers."

- Supported Work Program, Winne-Fond Consortium
  Oshkosh, Wisconsin:

  "Replication requires substantial coordination and cooperation of the major community agencies in the field of manpower, mental health services, vocational schools, various public and social service agencies, private sources, etc."

- FEWE and OJT, Genesee-Lapeer-Shiawassee-Flint
  Employment and Training Consortium
  Flint, Michigan:

  "Need very active labor market and skilled employer education programs."

- To Serve Handicapped and Disabled Veterans
  Inland Manpower Association
  Colten, California:

  "Replication requires good public relations and a dedicated staff as well as cooperation with the Department of Vocational Rehabilitation and the Employment Services."

Once again, working with the private sector is seen as a major facilitator to successful program implementation. In addition, the experiences of the NPSPS projects indicate that greater cooperation among all actors in the employment process, including rehabilitation as well as employment agencies, is necessary if a coordinated and focused approach is to materialize.

Title III -- Special Projects

Perhaps one of the most successful DOL-funded efforts to expand the employment opportunities of the disabled has been the Special Projects funded under CETA Title III. The primary focus of these six national contracts is: (1) to provide handicapped individuals with on-the-job training, classroom training, or work experience related to pre-identified jobs in the community; and (2) to promote and develop a wide range of new job opportunities for the disabled.[1] At present, the following national associations have been funded under this effort: the Epilepsy Foundation of America, the National Association for Retarded Citizens, the Goodwill Industries of America, the Association of Rehabilitation Facilities, Mainstream Inc., and the Electronic Industries Foundation. While each of the six programs have incorporated special, unique features into their service delivery package, all six share a certain common philosophy and approach. The operating principal for all of these programs is to first identify the types of jobs currently existing in the community and then either train handicapped individuals to fill these positions or facilitate the referral of qualified handicapped individuals to these jobs. In all cases, the projects work closely with the local private sector in expanding job opportunities for the disabled and making private employers aware of the types of jobs handicapped individuals "can perform."

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[1] Interview with Harold Rieve, Director, CETA -- Tiele III, Special Programs, October 30, 1979.

In the course of establishing their programs, all of the six organizations have dealt with a wide range of problems commonly thought to be associated with the employment of the handicapped. The problems most frequently faced by these projects include several of those anticipated in the design of Berkeley Planning Associates' study effort. Specifically, the issue of employer attitudes and the limited employability of the handicapped due to inadequate training and other vocational rehabilitation efforts are perceived as major barriers to the program's full success. However, the federal monitors of these programs felt that the Title III grantees and those receiving Project With Industry grants from the Rehabilitation Service Administration has developed an approach which successfully confronts these concerns. In order to better describe this approach, the experiences of two of the Title III grantees, the Electronics Industry Foundation and the Goodwill Industries of America, are briefly discussed. Both of these organizations are also Projects With Industry grantees.

In reviewing these two demonstration efforts, the reader should keep in mind that the two programs, while similar in intent and philosophy, differ in the level of services provided directly to the clients. The Electronics Industry Foundation essentially operates a placement service through which qualified handicapped individuals are put in contact with employers having job openings. In contrast, the Goodwill Industries' program includes a training component whereby potential applicants are enrolled in a training or work experience program designed to improve clients' level of skills, thereby making their clients more competitive.

1) The Electronics Industry Foundation[1]

The Title III funding provided to the Electronics Industry Foundation (EIF) has been used to increase staff capacity and coordination among the EIF's three Projects With Industry (PWI) sites, funded under the Rehabilitation Services Administration. The philosophy behind the EIF/PWI model is that the area offices do not replicate existing community job placement or support services for the handicapped. Rather, they serve to facilitate existing programs and to develop greater cooperation between the various actors in the employment picture. In essence, the area offices act as an interface between industry and the existing community placement resources, such as the local Department of Vocational Rehabilitation, helping industry meet its manpower needs, and helping rehabilitation agencies place handicapped workers in jobs. The majority of the jobs offered to individuals through these centers are entry-level, non-professional, white-collar occupations, with a limited number of blue-collar positions. The jobs are obtained in a competitive market and no subsidies are offered to the employers. Personnel associated with the EIF/PWI project stress that the area offices do not run a placement system; these centers provide an opportunity, not an advantage, to potential employment.

The specific problems faced by the area offices involve a lack of understanding on the part of local vocational rehabilitation agencies of the needs and demands of industry, the lack of qualified applicants for the jobs that are available, and certain negative attitudes of employers toward hiring the disabled. In terms of the first issue, EIF/PWI staff said that the experience of the area offices with local rehabilitation agencies indicate that such agencies do not know what skills are needed in the current labor market nor are they familiar with the employment needs of the local business and industrial sectors. "They do not speak industry's language nor are they familiar with the requirements of industry," EIF personnel said. Consequently, not only do the EIF/PWI centers address themselves to the needs of industry, they also work at reshaping the thinking of local rehabilitation officials and counselors.

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[1] Information in this section was obtained through interviews with William Newell, national staff of the Electronics Industry Foundation and James Geletta, special consultant to EIF, December 12, 1979.

The EIF/PWI staff said that a key problem faced by their area offices is not obtaining job listings but rather finding disabled individuals with the technical skills necessary to fill the thousands of job slots they have available. According to data gathered by EIF on its program between March, 1977 and December, 1978, 70% of the jobs listed with the area offices did not require a college degree and roughly one quarter of the jobs did not involve prior experience in the electronics' field.[1] Since the project started, more than 9,400 jobs have been identified by 61 different participating companies; in contrast, only 466 individuals have been judged by the area offices as qualifying for these positions and therefore have been referred to an employer.[2] The lack of qualified handicapped job applicants has led EIF/PWI personnel to conclude that the current vocational rehabilitation programs operating at the local level are not providing their clients with the skills necessary to successfully compete in today's labor market. To increase their ability to refer applicants to employers, EIF is exploring possibilities which would allow the area offices to provide a short (under 26 weeks) skill training period during which time individuals would be provided with intensive training in order to better equip them to handle the existing types of jobs available.

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[1] James R. Geletka, "Electronic Industries Make a Connection with Handicapped Workers," American Rehabilitation 4:5 (May-June), 1979, p. 9.

[2] *Ibid.*, p. 10

In regard to employer attitudes, the EIP/PWI staff said the area offices have encountered certain resistance, adding that such resistance had been anticipated. While the area offices do not force industry to accept a referral (i.e., there are no quota systems or mandatory participation requirements), the projects do work at altering employer perceptions so that individuals are hired based on their skills or skill potential and that jobs are filled based on what is actually needed to complete the job, not what might be an inflated view of the necessary skills. In addressing employer resistance to the project, the area office staff generally will focus on differentiating between unfounded fears and real concerns. While the project has consistently found acceptance among top management and have made good progress at the personnel office level, the line supervisors continue to present the greatest challenge. In general, supervisors, more than any other management level personnel, tend to think in terms of productivity and meeting their production deadlines. They find it difficult to believe that a handicapped individual can perform as well on the job as an able-bodied individual. The area offices have found, however, that even this resistance can be overcome, or at least minimized, by getting people together to discuss their fears and to present facts regarding the productivity of the disabled.[1]

The EIF/PWI experience seems to indicate that industry does not want subsidies and special considerations as much as they want people who can do the job and require a minimum amount of on-the-job training to be efficieint. "If they cannot to the job," EIF/PWI officials commented, "they are not worth anything to industry even if the government is paying their entire salary." While they indicated that industry is not looking for subsidies, they did concede that a system whereby the wages of a handicapped individual were covered for a short, probationary period might be seen as an incentive to hire the handicapped.[2] The utility of such payments as an incentive, however, would be offset if it involved a large amount of additional paperwork and recordkeeping.

In summarizing their program, EIF/PWI personnel stressed that the purpose of their efforts is to get individuals into a position from which they can be competitive. Special counseling or training may be part of this process in that it will increase the client's chances of being competitive. The area offices do not place individuals in jobs; rather they help individuals win jobs." The EIF/PWI project has been built on industry's concept of marketing -- nothing is being given away. Rather, the process is considered to be a fair exchange: the area offices have a product to sell (qualified labor) and industry needs the product.

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[1] In making these presentations, the area office staff will usually cite studies such as DuPont's research which show that the disabled can perform as well on-the-job as the nondisabled. These types of studies are further discussed in Section II of this report.

[2] DOL has issued instructions to its regional employment and training administrators for implementing the Targeted Jobs Tax Credit Program. Under the Tax Credit Program, employers who hire eligible individuals will be eligible for a tax credit equal to 50% of the employee's wages up to $6,000 in the first year, and 25% of such wages during the second year. The maximum credit allowed is $3,000 the first year, and $1,500 the second year. The tax credits apply to wage costs incurred by companies between January 1, 1979 and December 31, 1980 for certified employees hired after September 26, 1978.

2) Goodwill Industries of America[1]

Like EIF, Goodwill merges its PWI grant and Title II CETA grant into the provision of a single program. Like EIF, Goodwill operates a number of sites throughout the country (23) with each center serving as a facilitator between local industry and the local handicapped population. To date, Goodwill's PWI projects have made over 1,400 placements into nonsubsidized, private sector employment. Goodwill's program developers believe that, in the past, handicapped individuals have been trained for jobs that, in many cases, no longer exist. To offset this problem, the Goodwill's PWI Title III area offices first identify current job openings and then train specific individuals for these jobs, usually utilizing the types of equipment that the job will require. In all areas, the Goodwill projects work closely with the local CETA Prime Sponsors and their Private Industry Councils (developed under Title VII).

Goodwill staff echoed the feelings of the EIF personnel regarding state VR agencies, adding that the fatal flaw with VR agencies is that they have attempted to conduct a public relations campaign (i.e., hiring the handicapped is the humanitarian thing to do), rather than provide their handicapped clients with the skills they need to obtain and to hold a full-time job in the private sector. "Industry only wants someone who can do the job; they do not want additional government handouts and the paperwork that usually comes with such handouts." Goodwill personnel added that if providing financial incentives was the only problem, existing laws, such as the Target Jobs Tax Credit, already provide allowances to those hiring special populations, like the handicapped.

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[1] Information in this section was obtained through an interview with Jack Scott, Project Director, Goodwill Industries' Projects with Industry, December 13, 1979.

The following steps are generally followed in setting up a PWI through the Goodwill system:

1. a job needs survey is conducted to identify the specific sectors and types of occupations which show the most promise for expansion or employment for the disabled;
2. communication with local VR agencies is established to determine the specific skill level and specific problems facing the local handicapped population;
3. an Advisory Council, which includes representatives from industry, the VR agencies, and other interested community and civic groups, is established to prioritize the community's training needs and formulate a specific training program;
4. clients for the training program are then recruited through the local VR agencies and through self-referrals; and
5. following completion of training, a referral is made to a specific employer who may or may not hire the individual.

Clients are paid during the training period either through VR monies or through contracts with the Goodwill sheltered workshops, which are sometimes used as the training site. The average hourly wage paid to individuals starting employment is above $4. In addition to providing services prior to placement, the PWI staff will contact the workers and the employers once a week for two weeks, every other week for 60 to 90 days (as needed) and then on an as-needed basis. This feedback provides not only additional support to both the client and the employer, but also useful information to the PWI staff regarding possible changes in their program.

In addition to providing training for the clients, the Goodwill PWIs also conduct training classes for the supervisors who will be working with the clients following their placement. This is done in order to ease some of the fears the supervisors have regarding the productivity of the worker and to help the supervisor learn to relate to the handicapped worker just as he or she would relate to an able-bodied worker. "We tell them that if the handicapped person is not performing his or her job as the supervisor feels the job should be performed, then the supervisor should correct the individual just as he or she would if the person was able-bodied."

Goodwill personnel said that none of their programs have met with resistance from the local business sector, adding that the approach taken by the PWI staff is very business oriented and professional. "We don't mention equal opportunity laws; we don't ask for charity. We use a strict marketing approach, similar to that used by any business which has a good product to offer." Once the program is established in a community, local businesses actually become involved in promoting the program to other industries and will often take an active role in expanding the PWI's training options.

SHELTERED WORKSHOPS

While the intent of the Berkeley Planning Associates present study is to focus on private sector employment opportunities and barriers for the disabled, a cursory review of the recently concluded DOL study on sheltered workshops and their clients is in order for a number of reasons. First, the workshops currently offer the only consistent, structured form of employment for the severely handicapped and, therefore, are one of the major employers of the disabled. Over 145,000 physically and mentally handicapped individuals were employed daily by the workshops in 1976. Second, increasing efforts to deinstitutionalize the mentally and physically handicapped has led to a growing need for such workshops as a means of providing productive outlets for these individuals as well as providing a source of earned income. Third, the sheltered workshops, given certain improvements currently being contemplated by the Department of Labor, may well become more integrated into the private sector and thereby provide inroads for the disabled into the private sector as well as provide more diversified jobs at higher wages for the severely disabled.

The Sheltered Workshop Study, jointly funded by the U.S. Department of Labor's Employment Standards Administration and the Employment and Training Administration, was conducted in two stages: the first included a comprehensive survey of all 1,800 certified sheltered workshops in the country in 1973[1] and the second included personnel interviews with a stratified sample of 3,400 handicapped clients of these workshops in early 1976.[2] The three primary questions that the study was designed to address were:[3]

- How healthy are the workshops as an employment setting?
- What is the nature of sheltered workshops employment and does the work being performed in the workshops provide workers with the type of training that will facilitate the transition to private sector employment?
- What types of restructuring should take place in the workshops system in order to make it more effective?

While the study was able to provide a fairly detailed description of the nature of the sheltered workshops and the nature of their client populations, no simple answers emerged as to how the sheltered workshop system might be reformed. The lack of clear policy alternatives partially stem from the mixed messages and missions under which the program operates. Sheltered workshops are, by definition, instructed to hire those individuals who cannot, for whatever reasons, function efficiently in the private, profit-conscious sector. They are also told, however, that they should pay their employees higher wages and be successful business ventures.

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[1] U.S. Department of Labor Employment Standards Administration and Employment and Training Administration, Sheltered Workshop Study -- Volume I: Workshop Survey (Washington, D.C.: U.S. Government Printing Office) June 1977.

[2] ______________ Sheltered Workshop Study -- Volume II: Study of Handicapped Clients in Sheltered Workshop and Recommendations of the Secretary (Washington, D.C.: U.S. Government Printing Office) March, 1979.

[3] Interview with James D. Brown, Deputy Director, Employment Standards Administration, DOL, December 13, 1979.

The inability to simultaneously realize both of these objectives becomes clear as one reviews the study's major findings:

- The earnings of sheltered workshop clients did not keep pace over the 1973-1976 period with the 44% increase in the FLSA statutory minimum wage, which rose from $1.60 to $2.30. The earnings of those employed in the work activities centers (generally the more severely disabled, and considered to be the lowest producers) increased from 34¢ an hour in 1973 to 43¢ an hour in 1976 (a 26% increase). Clients in the regular program workshops (the higher producers) rose from $1.40 in 1973 to $1.54 in 1976 (a 10% increase).

- Physically handicapped clients, generally considered the better producers, earned much higher average wages ($1.63) than the mentally disabled clients (79¢). Because the physically disabled comprised less than one-fifth of the workshop population, however, average wages for the total population continue to be low.

- Primarily due to a lack of work, many clients were employed for relatively short work weeks (under 20 hours per week). In addition, the 1973 study reported that the workshops were substantially underutilized, with about one-half reporting unused capacity.

- In general, those workshops that have been around the longest were more likely to pay a higher wage, were more financially sound business ventures, and were better integrated into their communities.

- Clients with developmental disabilities (mental retardation), cerebral palsy, neurological disorders) comprise 83% of the workshops population. Also more than four-fifths of the clients have had their disability for life.

- State rehabilitation agencies are the major source of referral for clients in training and/or evaluation programs and regular program workshops, but schools, hospitals, institutions, and welfare offices are the most common source of referrals for work activities center clients.

- Very few of the workshop clients were referred by employment and training programs operated with Comprehensive Employment and Training Act (CETA) funds.

- Sheltered workshops seem to be moving in two separate directions simultaneously: (1) furnishing of intensive, transitional services to higher functioning handicapped persons in training and evaluation programs; and (2) providing long-term employment for severely handicapped persons for whom work is only a part of a comprehensive therapeutic program in work activities centers.

- Client disability is considered to be a major hindrance to maintaining regular, full-time employment for more than one-third of the clients and a moderate interference for another one-third. Disability is considered to have little or no effect on the productivity of the other one-third.

- A majority of the clients indicated that the workshop experience was beneficial in moving them toward a goal of employment outside the workshop. However, only 12% of the total workshop population generally makes this transition. Seven percent of the work activities center workers (the most severely disabled) made the transition to private sector employment. Of those who are placed in unsubsidized jobs, only 10-15% are unsuccessful in adjusting to their new employment settings.

In formulating their policy recommendations, Department of Labor Officials have stressed the need for sheltered workshops to reach beyond the very limited range in which they currently operate. At least one DOL official considers sheltered workshops as primarily a "holding facility" for deinstitutionalized mental patients. Participants in sheltered workshops are not only paid extremely low wages but also receive few, if any, fringe benefits. Rather than being perceived as employees fulfilling a job, they are perceived as clients being provided a service. To correct this situation, DOL is encouraging the private sector to more aggressively seek out and hire the severely handicapped and to consider subcontracting to sheltered workshops as a means of meeting their affirmative action plans. Also, DOL is encouraging its Employment and Training Administration (ETA), which monitors all CETA programs, and other agencies working with disadvantages individuals, to explore the possibility of broadening the population that could benefit from the workshop experience.[1] The Sheltered

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[1] One specifid proposal which has been raised is incorporating sheltered workshops into DOL's supported work program. At present, this project assists a variety of hard-to-employ groups, such as welfare mothers, ex-offenders, ex-addicts and youth in obtaining actual work experience. This project and its possible expansion to include the disabled will be discussed in the following section.

Workshop Study also encouraged workshops to take a more active role in educating local employers regarding the value of hiring persons who emerge from the workshop environment, and of helping such persons bridge the gap between sheltered and competitive employment.

In making specific recommendations to Congress, the study noted that although the great majority of the workshop clients are long-term clients who do not obtain jobs in regular industry, a substantial portion of the federal money that goes to workshops, directly or indirectly, is geared toward the short-term clients. "Workshops will continue to have weak programs, and earnings of the workers will continue to be inadequate unless the workshops receive greater financial assistance. Under present conditions, most workshops cannot hire and retain competent staff in adequate numbers and are unable to provide the equipment and working conditions that would enable the workshop worker to make significant progress."[1] The study notes, however, that such additional funding will need to be carefully monitored to ensure that workshops continue to place those individuals ready for unsubsidized employment and that the severely disabled, who generally remain in the program several years, benefit from program improvements, job accommodations, and increased salary.

Recognizing the inadequate salary provided to most workshops participants, the study suggests that a series of pilot demonstration projects be conducted to explore the feasibility of providing wage supplements for those handicapped workers in sheltered workshops who are unable to earn a minimum wage because of the severity of their disability. The study suggests that the wage supplement payment be structured so as to provide an incentive for clients to increase their productivity through gradual reduction of the supplement as wages increase. The demonstration projects could be designed to answer the question as to which is the best supplement to the disabled person's sheltered workshop income. "There are strong indications that disability and public assistance payments may act as a disincentive to a workshop employee who, rather than lose those assured payments, may attempt to hold down his or her earned income."[1]

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[1] Sheltered Workshop Study -- Volume II, p. 10.

ADDITIONAL DEMONSTRATION EFFORTS FUNDED BY DOL

A number of limited demonstration programs and research efforts have been funded by DOL to further define successful strategies for facilitating the employment of the disabled. The following summarizes a sample of these efforts, highlighting their key findings.

- Employment of the Handicapped in State Civil Service (Project Skill)
  State of Wisconsin, Department of Administration[2]

Project Skill, which was initially funded in 1974, was an attempt by the State of Wisconsin to alter its civil service system in a way that would facilitate the inclusion of mentally retarded and emotionally disturbed individuals into the civil service pay and promotion system. The specific objectives of the project were to see if (1) competitive employment and economic independence are more attainable when training and work adjustment activities are part of an employer's system; (2) a civil service system can be adapted to the employment needs of less severely mentally retarded and emotionally disturbed persons; and (3) the rehabilitation process is enhanced when the client is being trained for a specific available job in a regular work setting at the same wages and privileges as persons who are not handicapped. In order to realize these objectives, the Project Skill staff developed jobs in state civil service hiring units, obtained commitments for trainee positions, set up special civil service examining procedures, and recruited eligible applicants. During its first two years of operation, 105 persons were placed, 65 of whom had been diagnosed as mentally retarded and 40 as restored emotionally ill. Among the positions filled were building maintenance helpers, laborers, clerical workers, food service workers, and laundry workers.

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[1] Sheltered Workshop Study -- Volume II, p. 11. The entire issue of disincentives to employment inherent in certain public assistance programs is further explored in Section II of this report.

[2] The objectives and results of this program are summarized in U.S. Department of Labor, Project Skill: Strategies and Techniques (Washington, DC: Research and Development Monograph #54, DOL, Employment and Training Administration), 1978.

In developing the program, Project Skill staff found a number of activities facilitated the successful placement of clients from both the client's and the employer's perspectives. These activities included:

- providing an orientation for supervisors in methods for training and supervising the target population and, in some cases, providing actual on-the-job training assistance;
- providing appropriate orientation for co-workers to aid in the adjustment of the trainee to the work situation;[1]
- providing follow-up contacts with both the trainee and the supervisor.

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[1] One of the major obstacles to the successful placement of the participants was the attitudes of fellow workers who saw their own status downgraded by the fact that a mentally retarded individual did the same work as they did. These negative feelings were generally overcome, however, as the workers got to know the program participants on an individual basis.

- making provisions for job adjustment counseling for the client; and
- referring trainees to other supportive and volunteer services.

While the project initially covered salaries of the clients during the training period (usually up to six months), this subsidy was discontinued at the end of the federal demonstration period. The decision to discontinue the training subsidy was due in part to the termination of federal funds. More importantly, however, the elimination of wage supports was possible because Project Skill trainees were able to perform at a level that was very near that of employees hired through traditional methods.[1]

The overall success of Project Skill is due not only to the general structure of its program but also to the manner in which potential applicants were screened. One of the strongest criticisms of the program is that it tended to "cream" the most productive and job-ready workers from local sheltered workshops and other programs. Richard McAllister, the Project Officer for the study, said that even though Project Skill began with the most employable clients, many of these individuals would not have made the transition to unsubsidized employment without Project Skill's assistance.[2] The State of Wisconsin was equally impressed with the success of the program and continued to support Project Skill following the termination of the demonstration grant through the use of CETA funds.

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[1] Because Project Skill trainees were performing at levels equal to the regular trainees, agencies were asked to pay for this productivity. The Project's experience in not using subsidies has shown that agencies will hire Project Skill trainees in regular, budgeted positions. However, job development did become more difficult during the training period because potential employers had to find funding for the position within their own budgets.

[2] Interview with Richard McAllister, Project Officer for Project Skill, DOL Employment and Training Administration, December 12, 1979.

- Physical Rehabilitation and Employment of AFDC Recipients

  Dr. Daphne A. Roe, Cornell University

The project demonstrated that persons who have marketable skills but who are currently unemployed because of health-related work disabilities, can be returned to the labor market at minimal cost. Individuals who were eligible to participate in WIN programs but could not due to health problems, such as chronic dermatoses, nutritional anemia, obesity, and back problems, were allowed into the employment program and simultaneously enrolled in a remedial program to address their specific health problems. The demonstration project found that once the health-related barrier to employment was addressed, these individuals stayed on the job longer and increased their overall employability. The study also found that these gains were made at relatively minimal increases in the WIN program's overall administrative costs.

- Rearranged Work Schedules of Handicapped Employees in the Private Sector

  Rehab Group, Inc., Arlington, Virginia

The project explored the impact of different work arrangements for handicapped employees. The study was conducted in one firm, Control Data Corporation, and involved the work situations of eleven handicapped employees and 109 non-handicapped employees who worked rearranged schedules. The non-handicapped workers were the comparison group. The project, which was completed in June 1978, concluded that: (1) both handicapped and non-handicapped employees view flexible working hours as highly beneficial; they believe that morale was higher since establishing flexible hours and that it was easier to keep doctor appointments, for example, without being absent from work; (2) most were satisfied with their work; and (3) their families were equally satisfied with their work arrangement.

- The National Supported Work Demonstration

  Manpower Demonstration Research Corporation, Mathematica Policy Research, Inc.

The National Supported Work Demonstration is an experiment to test the effectiveness of a subsidized work experience on the lives of people with long-standing employment problems. The current target populations include female, long-term AFDC beneficiaries; ex-addicts; ex-offenders; and young school drop-outs, many of whom have criminal records. While the physically disabled population has not been included in the demonstration effort, to date, some thought is being given to including this subpopulation in future efforts of this kind.[1] Primarily, the program would use CETA funds to cover the wages of handicapped individuals currently employed in sheltered workshops. (The use of CETA would allow for the wages in sheltered workshops to be raised to minimum wage.) One benefit of this approach from the Prime Sponsor's point of view is that it would facilitate the Prime Sponsor's meeting their requirements to serve "x" number of handicapped individuals.

Under the supported work concept, individuals work in a very structured setting for either a 12-month or 18-month period. At the end of this period, graduation is mandatory, and the participants ideally will move into unsubsidized employment. The initial findings of the demonstration effort are problematic, however, because specific federal support policies allowed program participants to extend their involvement in the program or to receive Special Unemployment Assistance (SUA) for several months following their termination from the supported work effort. While the full impact of this policy on the flow of participants into the regular labor market has not been determined, the initial guess by the firm conducting the evaluation of the support work effort is that it has been "substantial."[1]

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[1] Interview with Frederick Kramer, Office of Policy Research and Development, Employment and Training Administration, DOL, December 12, 1979.

The types of activities performed in these structured workshops vary greatly, from recapping tires, to boat building, to furniture refinishing to home repairs for the elderly. The primary emphasis in these projects is to provide work experience as opposed to training, and to give participants the work experience necessary to secure unsubsidized employment. Initial findings indicate that the participants seem to have little trouble finding jobs at the time they terminate from the program; to date, roughly 40% have experienced a positive transition. The types of jobs obtained by former supported workers are mostly entry-level positions such as clerks, cooks, waiters, and factory workers. The overall average beginning working wage after leaving supported work is $3.95 per hour. The major reasons individuals do not experience a successful transition is employer attitude and specific pathologies that the individual has not yet overcome. Program administrators do not know if the observed "negative employer attitude" would extend to the disabled population, adding that under the current program, these negative attitudes reflect mistrust toward ex-addicts and ex-offenders.

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[1] Mathematica Policy Research, Inc., The National Supported Work Demonstration: Effects During the First 18 Months after Enrollment. Report prepared for the Manpower Demonstration Research Corporation, U.S. Department of Labor. April 1979, Summary, p. ix.

PRIVATE SECTOR INITIATIVES FOR THE DISABLED

The growth of programs designed to facilitate the movement of the disabled into private sector jobs has occurred not only within government but also within the private sector. While the passage of Section 504 has forced an increased awareness on the part of many private agencies of their responsibilities toward the handicapped, private industry, business associations, and labor unions have undertaken demonstration efforts and promoted policy changes on a voluntary basis. For example, in establishing its Private Sector Initiative Program, the Employment and Training Administration obtained the cooperation of national employer organizations and labor unions.[1] The National Alliance of Business worked with ETA to set up Private Industry Councils and to assist Prime Sponsors in developing new activities to promote additional private sector involvement in CETA. The U.S. Chamber of Commerce and other business associations also assisted in getting the program implemented at the local level. On the labor side, the Human Resources Development Institute of the AFL-CIO is providing technical assistance to Prime Sponsors in obtaining the required union representation on each Private Industry Council.

On a smaller scale, there has been a growing trend for industry to become more directly involved in the rehabilitation of employees suffering from mental, emotional, or physical handicaps. According to Paul Ashton, rehabilitation program supervisor for the 3M Company, the major reasons for these internal rehabilitation developments include:[2]

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[1] Employment and Training Report of the President, p. 48.

[2] Paul C. Ashton, "Rehabilitation in a Major Corporate Setting," Journal of Rehabilitation 45:3(July-September) p. 26.

1. The rehabilitation staff is on the scene and can more readily identify employees who may require help, even if these persons have not been referred for assistance.
2. The staff's knowledge of the inner workings of the company enables them to find potential job opportunities for habilitated employees.
3. The staff can provide important follow-up services to assure that rehabilitated employees are performing useful work.

Ashton goes on to say that any company that employs over 1,000 individuals[2] can enjoy legal as well as moral benefits from establishing an internal rehabilitation program. "When a worker becomes injured, ill, or otherwise incapacitated, the mployer and worker alike become acutely aware of the production which has been expected. The employee wants to be compensated during the incapacity and usually wants to get back on the job. If this can be arranged, the company can reduce its insurance and related costs (legal obligations) while helping the worker and his or her family (moral obligations) adjust to permanent or temporary changes resulting from the disability."[2]

The 3M program is conducted by a professional trained supervisor who chairs a Rehabilitation Committee, representing the various key departments concerned with employee benefits and performance. These include, among others, representatives of the firm's personnel department, employee

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[1] Firms with fewer than 1,000 employees may find it more economical to contract with private rehabilitation services to assist their disabled employees.

[2] Ashton, op. cit., p. 27.

benefits and services department and medical department. In general, the procedures followed in the 3M program include:

- referral to the committee either by a supervisor or by self;
- interviewing by a trained counselor, during which time the type and extent of the handicap is discussed and an assessment of his or her employment interests is made;
- reviewing these findings and outlining a rehabilitation program;
- exploring the various options with the client, determining if he or she can return to the original job or if an alternative job is required; and
- following-up with both the client and his or her supervisor in the new job placement.

When the 3M program was reported in the Wall Street Journal (September 15, 1977), the company received requests for further information from 300 companies and 700 private institutions, agencies, and individuals.[1]

In addition to the growing number of companies involved in establishing internal rehabilitation efforts, the provision of rehabilitation services by specialized, private sector sources has gained growing acceptance in recent years. Small firms or large firms that have chosen not to establish a formal rehabilitation unit can draw on a wide range of private suppliers of rehabilitation counseling, therapy, and specialized training. While the specific number of these agencies is not known, experts in the field believe that more than 25,000 persons are employed in some aspect of this type of service, and that over 500,000 disabled persons are provided services every year through private rehabilitation sources.[1] Interest in such agencies can be found not only within the industrial sector but also among insurance companies, who stand to gain considerable monetary benefits from returning disabled individuals to active employment. When a worker is injured on the job, maximum medical recovery at the earliest possible time is the first objective of both the employer and the firm's insurance agent. "Much of the savings to insurance and industry is in the medical area, since under most coverages and exposures there is liability for unlimited medical expense."[2] Besides providing an option to achieve cost containment, insurance and industry have also found that the provision of rehabilitation services enhances employee relations.

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[1] Ashton, op. cit., p. 29.

While industry and insurance companies have an obvious vested interest in such rehabilitation activities, the various labor unions are also recognizing the need to pay particular attention to ensuring that employees injured on the job have maximum opportunity to remain employed. Under a grant from the Rehabilitation Services Administration, the Amalgamated Clothing and Textile Workers Union (ACTWU) developed a model union program for handicapped members and job-seekers. The experience of this demonstration effort found that unions can contribute to: (a) maintaining their present members in the work force following the onset of disability; (b) returning to the work force union members who have withdrawn from it due to disability; and (c) promoting the new entry of handicapped persons into unionized jobs.[1] The ACTWU model, which has general application to various union-employer settings, consisted of four components:[2]

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[1] George Welch, "The Relationship of Rehabilitation with Industry," Journal of Rehabilitation 45:3(July-September) p. 24.

[2] *Ibid*., p. 25.

- Case Identification: including self-reports of disabilities through in-plant surveys, individuals identified as a result of reviewing ACTWU disability insurance claimants supplied by the union's insurance carrier,and referrals by supervisors, management, and the union's social service division.
- Social Services: including an interview with all clients by a trained rehabilitation counselor to determine the extent and impact of the client's disability, to identify the client's employment interests, and to develop a comprehensive rehabilitation program, drawing on local public and private rehabilitation services.
- Union-Management Efforts: including joint conduct of an in-plant survey to determine the extent and nature of the company's disabled population, cooperation in documenting the types of accommodations that have already been made to facilitate the re-employment of disabled workers, and cooperation in promoting the additional employment of new handicapped workers.

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[1] Enteen, Robert, Madeline Tramm, and Roger Herman, "Unions and Affirmative Action for Handicapped Individuals," Rehabilitation Literature, 40:7, p. 196.

[2] Ibid.

- Education and Publicity: including all publications and presentations that explain the service model and document its success.

While the union was able to facilitate the retention of workers injured on the job or through other circumstances, its efforts to actively recruit already handicapped workers was limited by a number of factors that illustrate the types of problems most unions would face in attempting to adopt such a program. First, the country's generally slow economic growth has resulted in fewer new job openings. This limited number of new jobs reduces the flexibility of both the union and the employer in creating job opportunities for the disabled. Second, and perhaps more significant from the union's point of view, is the need to first provide jobs for current union members who may be unemployed due to lay-offs or entire plants being closed. "Where a large shop has closed, there is generally a surplus of experienced job-ready workers, including some with skills ordinarily in short supply. Should new jobs become available, it would be the responsibility of the union first to find places for their present members, and only afterwards to promote the new hiring of handicapped persons."[1]

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[1] Enteen, op. cit., p. 199.

REHABILITATION SERVICES ADMINISTRATION -- DEPARTMENT OF EDUCATION

The principal federal agency concerned with the provision of vocational rehabilitation services is the Rehabilitation Services Administration (RSA) located within the Department of Education. Although RSA does not provide direct services to the disabled, it does assist in the provision of such services through its subsidization of state vocational rehabilitation programs and a variety of contractors and grantees conducting research, training, providing client services, and facility programs. The most important of the RSA programs is its support of state rehabilitation agencies. These agencies are usually independent agencies of vocational rehabilitation -- general, blind, or combined. Sometimes the agency is administered as part of a larger state department, usually the department responsible for vocational education. Through formula allotments based on the State's population and fiscal capacity (measured by per capita income), RSA augments state appropriations for direct rehabilitation services.

In order for the disabled individual to meet the eligibility criteria of the federal-state rehabilitation program, he or she must suffer from a physical or mental condition which is stable or progressive and produces a loss of function or a limitation on activities. Because of this disability, the individual is substantially handicapped in his or her ability to find employment or is forced to remain on jobs which are in some way unsuitable -- part-time, unsafe, underproductive. In addition, there must be a reasonable expectation that the rehabilitation services will enable the individual to engage in gainful vocational activity -- remunerative employment, sheltered employment, unpaid family employment. It is important to note that on the basis of these criteria, there are limitations on the clientele to whom rehabilitation services will be extended. The eligibility determination could be expected to disqualify those whose medical condition does not impede vocational activities, those who are either too young or too old, those whose medical condition is deemed so severe that vocational rehabilitation is a remote possibility, and those for whom vocational activity is not the desired goal or for whom the vocational goal is unrealistic. Special provisions in the 1978 act added authorization for independent living services for severely disabled. However, appropriations have been limited to grants for only 10 new IL projects.

The determination of eligibility is made by the vocational rehabilitation counselor on the basis of medical, psychological, economic, social and vocational data which is gathered from interviews with the prospective client, medical examinations, vocational interest test and other diagnostic instruments.

After an individual is admitted to the program, the client and counselor jointly map out a rehabilitation plan based on the information brought out in the initial interviews and testing as well as on the client's vocational aspirations. The Individualized Written Rehabilitation Program (IWRP) consists of a detailed outline of the steps required to reach the vocational goal, including services provided directly by the rehabilitation agency and state-operated rehabilitation centers as well as those goods and services which must be obtained from other public agencies and facilities or purchased from private vendors. The counselor monitors the provision of services, counsels the client, and acts as the client's advocate in obtaining services. As the plan is completed, the client usually is provided assistance in job placement when the goal is competitive employment. Once the client is on the job, the counselor continues to consult with both the client and the employer. Only when the client has maintained employment for at least sixty days can a case be closed as successfully rehabilitated.

Special note must be made here of the client's prominent role in designing the rehabilitation plan. The primary emphasis in the direction and goals of a rehabilitation plan is geared to the individual's needs and aspirations and not to the specific demand of the labor market. In this type of client-centered approach, the counselor's role is twofold: to act both as an advisor on the general and specific aspects of the rehabilitation plan and as a broker in obtaining the services necessary in the implementation of the plan. This focus on the client's needs differs from the focus of the previously discussed DOL-sponsored activities which place a heavy emphasis on first determining labor market conditions before constructing a training program.

The range of services which is incorporated into a rehabilitation plan depends on the individual case. Basic services which are available, when appropriate, include:

- restoration or amelioration of the disabling condition through medical, surgical and hospital care, related therapy, and the provision of prosthetic appliances.
- income maintenance and transportation during rehabilitation;
- counseling, guidance and training services;

- tools, equipment and licenses necessary for employment or the establishment of a small business, as well as initial stocks, supplies and management guidance in setting up a small business;
- reader and interpreter services for the blind and deaf, respectively;
- services to the family of the handicapped individual when they will make a substantial contribution to the client's rehabilitation; and
- placement services and follow-up services to help the rehabilitant maintain his employment status.

The Basic Support program, in addition to furnishing counselors and these direct services to clients, includes provisions for the establishment, construction or improvement of rehabilitation facilities. In fiscal year (FY) 1978 approximately $760,500,000 was appropriated for the Basic Support Program. More than 1.5 million persons were served and it is estimated that 286,000 were rehabilitated.

In addition to the Basic Support program, various projects have been supported through the RSA discretionary fund programs. Some of RSA's discretionary programs were transferred in the 1978 Act to the National Institute of Handicapped Research (NIHR). Most retain the same staff and mandate. Following is a description of the purpose of each program according to its legislative mandate. In the list, titles with double asterisks indicate programs currently housed in NIHR.[1]

1) PROGRAM AND PROJECT EVALUATION

The mission of evaluation in RSA is to: (a) direct and implement RSA responsibilities related to studies and evaluation of state agency programs and projects in vocational rehabilitation, (b) develop and implement evaluation standards required in the evaluation of the State/Federal Vocational Rehabilitation program and discretionary projects, (c) develop the evaluation strategy for RSA in concert with Central Office and Regional R&E Office staffs, and (d) provide technical assistance to Regional R&E staffs and the states in carrying out their evaluation functions (P.L. 93-112, 401, Sec. 130).[1]

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[1] Project Standards for RSA Discretionary Programs: Final Report. Berkeley Planning Associates, 1978. (This report was prepared based on the 1973 Act.)

The Rehabilitation Act of 1973 required all programs to be evaluated to determine their effectiveness in achieving prescribed goals, their impact on related programs, their structure and mechanism for the delivery of services and the relationship of these factors to cost. The Act required an annual assessment of the priorities to which evaluation effort should be directed and review of research and demonstration projects. Finally, states are required to annually evaluate their activities to meet VR program goals.

2) REHABILITATION RESEARCH AND DEMONSTRATION **

The Research and Demonstration (R&D) program authorized under Section 202 of the 1973 Act is an umbrella funding vehicle for Research and Training Centers (TRCs); Rehabilitation Engineering (RE); Spinal Cord Injury Research, Demonstration and Services (SCI); End-Stage Renal Disease Research and Demonstration (ESRD); and International Research, Demonstration and Training. These projects are discussed individually in other sections of this report. Here, the focus is on the overall characteristics of the R&D programs.

According to the authorizing legislation, R&D grants are "for the purpose of planning and conducting R&D and related activities which bear directly on the development of methods, procedures, and devices to assist in the provision of VR services to handicapped individuals, especially the most severely disabled." The federal regulations further emphasize that R&D projects should have direct and primary impact on the service delivery system.

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[1] This draft report includes references to the 1973 Rehabilitation Act. Subsequently titles and section numbers have been changed, in the compilation of the Act and the 1978 Amendments.

3) REHABILITATION RESEARCH AND TRAINING CENTERS (**)

The 1973 Act as amended greatly expands the purpose and scope of Research and Training Centers (RTCs). The legislation supplies both a challenge and an opportunity for RTCs to increase the scientific and technological information in the field of rehabilitation and impact services to handicapped citizens.

An evaluation of the RTC program was recently conducted by Abt Associates.

4) REHABILITATION ENGINEERING CENTERS (**)

The Rehabilitation Act of 1973 authorizes Rehabilitation Engineering Center (REC) grants under Section 202(b)(2) and individual project grants under Section 202(a)(1). The purpose of this program is to develop and integrate medical, engineering, and related services to resolve vocational and self-care problems of the severely handicapped. Another purpose is the development of information exchange systems and promotion of engineering research utilization.

In FY 1976, $4,127,789 was expended by RSA to support eight RECs while $2,122,108 was allocated to individual projects. The latter sum included $1 million for rehabilitation engineering research conducted in Research and Training Centers. In addition to domestic RECs, international projects are funded abroad in Poland, Egypt and Yugoslavia. The REC program was evaluated in 1977-78 by Berkeley Planning Associates.

5) END-STAGE RENAL DISEASE (**)

Authorized under Section 7(12) of the 1973 Rehabilitation Act, this program provides funds to state agencies to expand rehabilitation services to persons suffering from end-stage renal disease (ESRD). While the primary purpose of the grant is to assure that states develop policies to extend regular VR services to this group, the legislation recognizes that special medical services are often necessary to support client participation in vocational rehabilitation activities. A program of research for end-stage renal disease is authorized under Section 202(b)(4) of the Rehabilitation Act while Innovation and Expansion Grants are available under Section 120. Finally, Special Projects and Demonstrations, authorized under Section 304, may also be utilized to benefit this group. Service to this disability group and the Section 202 research for end-stage renal disease are discussed below.

6) INTERNATIONAL PROGRAM FOR REHABILITATION RESEARCH, DEMONSTRATION, AND TRAINING (**)

The Rehabilitation Act of 1973, as amended, and implementing regulations specify that:

> The Secretary may make grants to pay all or part of the cost of a program for international rehabilitation research, demonstration, and training for the purpose of developing new knowledge and methods in the rehabilitation of handicapped individuals in the United States, cooperating with and assisting in developing and sharing information found useful in other nations in rehabilitation of handicapped individuals and initiating a program to exchange experts and technical assistance in the field of rehabilitation of handicapped individuals with other nations as a means of increasing the levels of skills of rehabilitation personnel.

This agency has had a cooperative international research and demonstration program in selected countries since 1961 under P.L. 83-480 auspices. This cooperative program provides grants in local currencies to support research activities by government and non-government organizations in countries where U.S.-owned "excess currencies" are made available for research in the field of rehabilitation.[1] Such projects have been carried out in close collaboration with U.S. scientists representing many rehabilitation programs in universities, centers, and facilities. This has been made possible largely through an interchange of experts program.

7) REHABILITATION TRAINING

Rehabilitation Training is intended to fill the need for trained personnel in all fields contributing to the VR process. Section 203(a) of the Rehabilitation Act of 1973 authorizes grants or contracts for support of long-term training in established fields; Section 400(a)(2) provides short-term training and instruction in technical matters related to VR services, and funding to establish and maintain research fellowships in technical matters related to VR services.

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[1] The Special Foreign Currency Program provides for financing of research and demonstration projects with US-owned foreign currencies generated by the sale of US agricultural commodities, which exceed amounts needed by the US government for meeting Embassy and other primary requirements. These projects address problems of mutual concern to both the US and applicant governments and these proposals are officially sanctioned by the respective governments. Countries in which projects have been approved include Brazil, Burma, Egypt, Guinea, Israel, India, Morocco, Poland, Sri Lanka (formerly Ceylon), Syria, Tunisia, Yugoslavia, and Pakistan.

8) HELEN KELLER NATIONAL CENTER FOR DEAF-BLIND YOUTH AND ADULTS

The Helen Keller National Center (HKNC) was authorized to be established and operated by a public or nonprofit agency in the 1967 Amendment to the Vocational Rehabilitation Act, and is currently operating under authorization of Section 305 of the Rehabilitation Act of 1973. The purpose of the Center is to demonstrate methods of providing special services for the rehabilitation of deaf-blind persons, to conduct research and to expand and improve services to this population. Facilities were completed in 1976 and consist of the Research, Training and Administration Building, a Resident Building, and a Vocational Building.

9) SPECIAL PROJECTS AND DEMONSTRATIONS: IMPROVED SERVICES TO THE SEVERELY HANDICAPPED

Purpose: The projects authorized under Section 304(b)(1) of the Rehabilitation Act of 1973, as amended, are intended to expand or otherwise improve VR services to groups of severely handicapped individuals, including specifically the older blind, the deaf who have not achieved their maximum vocational potential, the spinal cord injured, and more recently the mentally ill (three projects in FY 77), multiple sclerosis, cerebral palsy and epilepsy (all priorities set for FY 78). Spinal cord projects, which utilize the bulk of 304(b)(1) funds, are also discussed in a separate section. It should also be pointed out that Developmental Disabilities is not specified as a target group for this project within the Act; however, this group was written into the regulations to ensure that certain grants made under the old 4(A)(1) authority were temporarily maintained.

Grants under this program may be used to pay all or part of the costs of projects including research and evaluation and the establishment of programs and facilities which hold promise of expanding or otherwise improving rehabilitation services. Generally, the grantee pays at least 10% of the project costs.

10) SPECIAL PROJECTS FOR INDIVIDUALS WITH SPINAL CORD INJURIES

Funds are authorized for research and special projects and demonstrations for programs aimed at the high priority population of paralyzed and other spinal cord injured (SCI) persons. The SCI Model Systems programs is being demonstrated through eleven Model Spinal Cord Injury Systems. SCI research projects have been funded to explore new technology development, evaluation of transitional living programs, and clinical approaches to treating and preventing complications of the spinal cord injured.

11) SPECIAL PROJECTS AND DEMONSTRATIONS: NEW APPROACHES TO SERVICE DELIVERY: MAKING RECREATIONAL ACTIVITIES ACCESSIBLE TO THE HANDICAPPED

Under Section 304(b)(3) of the Act, grants may be made to pay for all or part of projects (and research and evaluation in connection therewith) for operating programs to demonstrate methods of making recreational activities fully accessible to the handicapped. This program has no appropriation currently.

12) SPECIAL PROJECTS AND DEMONSTRATIONS: GRANTS FOR SERVICES FOR HANDICAPPED MIGRATORY AGRICULTURAL WORKERS OR SEASONAL FARMWORKERS

The purpose of conducting special projects or demonstrations for handicapped migratory agricultural workers, or seasonal farmworkers, is to provide vocational rehabilitation services for these workers and members of their families (whether or not handicapped) who are with them.

13) PROJECTS WITH INDUSTRY

These projects, discussed more fully in the previous section, are intended to prepare disabled and severely disabled persons for permanent employment in the private competitive labor market, via training and employment in a realistic work setting. Supportive services necessary to reach this goal are incorporated into this program. Projects With Industry (PWI) was initiated with the 1968 Amendments to the VR Act, and was incorporated into the Rehabilitation Act of 1973 (P.L. 93-112), Sec. 304(d). and is currently included in Title II, Part B, Section 201 of the Amendments to the Rehabilitation Act of 1973.

During the last half of 1973, 1063 out of 1724 or 62% of the disabled persons were placed in jobs with industry, at a cost of $1000 per placement (a reduction of $265 over the previous year) compared to $2137 in the State-Federal VR Program. In FY 1976, 2000 out of 2700 disabled individuals (74%) provided with services were placed in jobs in competitive employment following completion of their individualized programs. In 1977, 3600 handicapped individuals were placed in employment, out of 4800 served, for a 75% placement rate. The federal cost was $3.6 million. In 1978, 4500 were placed, at a cost of $4.5 million. However, given the likelihood that clients have utilized other services (e.g., physical restoration) during these years, these cost estimates may be underestimated.

14) CLIENT ASSISTANCE PROJECTS

Client Assistance Projects are pilot projects authorized to help VR clients and client-applicants to (1) overcome problems they may be having with the VR service delivery system and (2) better understand available services by providing counselors to inform and advise clients in the project area of all benefits available to them under the Act. The eleven initial projects have been expanded to 37. An evaluation of the CAP program was conducted under contract to Juarez and Associates. Section 105 of the Rehabilitation, Comprehensive Services, and Developmental Disabilities Amendments of 1978 eliminates restrictions on the number of client assistance projects and increases funding to 3.5 million for each of funding years. Also, assistance to handicapped individuals has been expanded to include legal and administrative assistance.

15) INNOVATION AND EXPANSION

The Innovation and Expansion Program (I&E) funds a wide variety of direct and indirect services to the most severely disabled and other disabled individuals who have unusual or difficult problems in connection with their rehabilitation. Of particular concern under this program are the disabled poor whose treatment, education and rehabilitation is shared by the state agency and other agencies.

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[1] This is based on subjective reporting and more uniform evaluation systems are now being developed.

Grants are made for the purpose of planning, preparing for and initiating special programs under the State Plan and are determined by the formula as specified in the Act.

16) COMPREHENSIVE SERVICES FOR INDEPENDENT LIVING

Title III, Section 301 of the Amendment to the Rehabilitation Act of 1973 authorizes grants to be supplementary to VR services grants to provide independent living services to persons too severely disabled for gainful employment but who may benefit from services which will enable them to live and function independently. Requirements and provisions of Title III are summarized as follows:

- authorizes allotments according to population, but at least $200,000;
- requires state plan for three year period;
- requires description of services to be provided; they may include regular VR services, but also, attendant care, physical rehabiltation, therapeutic treatment, etc.
- provides for grants for independent living Centers to offer the services described in State plan;
- provides for grants to States for establishing systems to protect and advocate rights of the severely disabled;
- provides for grants to States for independent living services for older blind individuals; and
- requires each recipient of grants under this Title to take affirmative action to employ qualified handicapped individuals.

II. EMPLOYMENT BARRIERS FACED BY THE DISABLED

Despite all of the programs and all of the legislative intitiatives, the fact remains that the handicapped continue to represent a disproportionate share of this nation's unemployed. In 1971, 72% of the disabled males aged 20 to 64 held jobs, compared with 98% of the nondisabled, and while 73% of the nondisabled had full-time, full-year jobs, only 36% of the disabled were able to obtain this type of job security.[1] Many would argue that such figures are appropriate because a certain percentage of the disabled are not able, for a variety of reasons, to work an eight-hour day, five days a week. However, the U.S. Bureau of the Census reported that only 13% of the persons between 18 and 64 years of age indicated that they had a health condition which limited the kind or amount of work they could perform, and over half of these indicated that the limitation did not prevent them from holding regular, full-time jobs.[2] While the reasons for the disabled jobs are many and varied, and include a number of factors which are not subject to policy manipulation, it is clear that certain hiring practices on the part of private employers, unfounded fears regarding the productivity and employability of the disabled, concerns over the need to undertake costly job modifications to the work site, and fears of increasing fringe benefit costs all work together in creating far less than a positive environment for handicapped job applicants. As reviewed in the previous sections, a number of the existing employment programs developed to enhance the employability of the disabled have indirectly addressed the need to work closely with private employers in eliminating stereotyped images of what the disabled can and cannot do on the job. Also, these demonstration projects have begun to identify those strategies which are most successful in facilitating the placement process, such as beginning with a comprehensive job analysis of local labor conditions and then training individuals for specific job openings as opposed to generalized training efforts and providing certain ongoing supportive services to clients following the actual job placement.

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[1] Sar A. Levitan and Robert Taggart, Jobs for the Disabled (Baltimore: Johns Hopkins Press) 1977.

[2] U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 334, "Demographic, Social, and Economic Profile of States," Spring 1976 (Washington, D.C.: U.S. Government Printing Office) 1979, Table 30, p. 78.

In order to effectively move beyond these limited, demonstration efforts, a greater understanding of the existing barriers to employment faced by the handicapped is necessary. The following section, therefore, explores the current state-of-the-art regarding the four specific barriers originally cited by the Government and which form the framework for Berkeley Planning Associates' research effort. Specifically, these issues include job modification, work productivity, fringe benefits, and employer hiring practices. Before directly addressing each of these eareas, a more generalized discussion of the current literature in the area of disabled employment concerns and barriers is presented.

THE MIXED MESSAGES OF THE LITERATURE

The literature itself is confusing and complex. In what is probably the most popularly cited recent study, Sar Levitan and Robert Taggart conclude:

> "Employer surveys evidence a general reluctance to hire the disabled when nondisabled workers are available. Many employers believe there are higher costs, such as increased workers compensation expenses or inflated medical and life insurance premiums. Although most believe that the disabled will be more reliable, they fear involuntary absenteeism and turnover. Another consideration is the lack of flexibility in job assignments and the difficulty of promoting."[1]
>
> "A number of studies of the job performance of the disabled have sought to prove that these views are irrational and discriminatory. Yet the performance of the carefully screened disabled persons who find work is not necessarily indicative of the potential of others. Moreover, the existence of a few productive employment opportunities for disabled workers does not prove that there is a large number of additional jobs they could fill. Whether based on reasonable best guesses by employers or on an unreasoned bias against the mentally and physically handicapped, the attitudes are facts of life that will be difficult to change. Publicity campaigns to encourage the hiring of the disabled have not met with much success."[1]

The footnotes cited as evidence by Levitan and Taggart are solely the report of The Urban Institute widely known in the vocational rehabilitation field as the "Comprehensive Needs Study" and one other small study in the Los Angeles area. The Urban Institute's award-winning Comprehensive Needs Study summarizes some 30 different studies during the past few decades concerning employer practices and labor market conditions for the disabled and concludes that:

> No study comparable to the 1948 Department of Labor study [which examined the employment records of 11,000 impaired and 18,000 carefully matched unimpaired workers and found that the impaired had comparable productivity and absenteeism rates and fewer disabling injuries on the job] seems to have been done since. What evidence has been presented more recently on performance rates of disabled workers has generally been consistent with the findings of that study.[2]

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[1] Ibid., p. 8.

[2] The Urban Institute, Report of the Comprehensive Service Needs Study (Washington, D.C.: Report to the Rehabilitation Services Administration, U.S. Department of Health, Education and Welfare, June 1975), p. 319.

> Virtually all the studies on employer attitudes have found that large proportions of employers disfavor hiring disabled people. There are strong indications that these attitudes are in large part based on nonrational negative feelings -- prejudice, in other words -- rather than on realistic fears of low productivity, high absenteeism, and high insurance rates.[1]

Berkeley Planning Associates at the time and subsequently upon re-review during the past few weeks of the studies cited by The Urban Institute report concurs with the conclusion about productivity but dissents from the findings concerning employer attitudes. While there are a few studies which found negative employer attitudes, our literature review suggests a preponderance of studies concluding that employer attitudes are not negative toward hiring the disabled, and that the large majority of employers do not perceive the disabled to be less productive, have higher absenteeism, or require more costly insurance.[2] Employer attitudes and perceptions do indicate a limited assessment of the ultimate employment potential of the disabled.

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[1] Ibid., p. 324.

[2] Although formal research studies do tend to find that employers generally do not have a strong prejudice against the disabled, many of those working in the state Vocational Rehabilitation and Job Services offices will argue that objections to hiring the disabled are indeed present in the private sector. Doris Woolley, handicap specialist for DOL's Employment and Training Administration, said that while most employers will tell you they have no problem hiring the disabled, when faced with an actual applicant for a specific job, many will produce a wide range of reasons why this particular individual is not well suited for this particular job. In its Placing Handicapped Applicants: An Employment Service Handbook, ETA administrators concede that "placement of the handicapped is often inhibited less by the handicap of the job seeker than by the fears and reluctance of the prospective employer." (p. 5)

Sometimes studies even in the same labor market are contradictory. For example, one survey published in 1972 of 108 Minnesota employers found that employers believed the handicapped cost more.[1] But a much larger though earlier survey[2] of 800 personnel managers and 510 first-line supervisors in the Minneapolis-St. Paul area, which was published in 1961, found that employers and supervisors did not perceive the handicapped as having higher absenteeism, turnover, accident rates, workers compensation cost, or lower production rates, nor did they perceive that the costs of hiring the handicapped were a significant factor. The study did find, however, that the disabled were perceived as having limited capabilities for advancement, training, and flexibility in moving from one job to another.

Much of the variances in the literature are explainable if the studies are closely examined. It appears that employer perceptions of the job performance of the disabled are not negative in terms of the jobs the disabled hold. Employers seldom report that the problems in performance or costs of the disabled on the job result in their being less likely to hire the disabled; this is true even of the employers in those studies which found employers perceived higher costs.[3] On the other hand, employers have low expectations of what the disabled can achieve as career employees. This is consistent with the empirical studies that consistently find that the disabled have earnings which are much lower than non-disabled workers and that the disabled disproportionately are found in marginal jobs or in "the secondary labor market."[1] (However, the empirical studies which control for age, sex, race, education, and occupation have found comparable income/wage levels for the disabled once they become employed.)[2] Employers, while demonstrating positive attitudes themselves, nevertheless do tend to perceive other employers as discriminating against the handicapped; personnel officers perceive first-line supervisors to be discriminating; and first-line supervisors suspect the personnel offices of discriminating and screening the disabled so that the supervisor only sees the best disabled workers.[1] The only employment study directly cited by Levitan and Taggart, for example, is one where Los Angeles employers were asked to rank various groups in the order in which they believed other firms would be likely to hire them.[2] The mentally ill and retarded were the least attractive workers, closely followed by alcoholics and addicts, and then by the physically disabled, who ranked below (worse than) minority groups, older workers, and ex-offenders. What such a methodology of eliciting guesses about others' prejudices or actions is capable of indicating about the attitudes and behavior of the respondent employer toward the disabled is most difficult to specify.

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[1] C. Arthur Williams, "Is Hiring the Handicapped Good Business?" Journal of Rehabilitation (March-April, 1972).

[2] V. Schletzer, R. Dawes, G. England, and L. Lofquist, Attitudinal Barriers to Employment (Minneapolis: University of Minnesota, Industrial Relations Center, Minnesota Studies in Vocational Rehabilitation, vol. XI, 1961).

[3] Thus, a survey of New York City firms in the 1950s found that two-thirds of employers stated that there were associated costs with hiring the disabled -- workers compensation insurance, absenteeism, health insurances. Yet the employers also said that such costs did not lead them to not hire the disabled. Federation Employment and Guidance Service, Survey of Employer's Practices and Policies in Hiring of Physically Impaired Workers, 1957.

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[1] See review of studies in The Urban Institute, op. cit., pp. 292-300. The 1972 Social Security survey of the disabled found that severely disabled individuals (7.2 million aged 20-64) had one-fifth the chance of being employed as a non-disabled person, and only one-seventh the chance of holding a full-time job. The occupationally disabled (3.5 million aged 20-64) fared better; they had the same rate of employment as the non-disabled but only three-fourths the chance of full-time work.

[2] The Urban Institute, op. cit., p. 300. One of the two principal studies cited by The Urban Institute was undertaken under Dr. Collignon's direction -- David Taussig, "The Participation of the Disabled in the Secondary Labor Market," Institute of Urban and Regional Development, University of California, Berkeley, 1972. The Urban Institute notes these studies used multivariate analysis. A more recent doctoral dissertation under Dr. Collignon's direction examining comparative incomes for different ethnic groups in California, with extensive controls for education, work experience, occupation, and other demographic factors, has found a statistically significant income "discount" for disability, but one which amounts to less than 10% of income. The 1972 Social Security survey of the disabled found that the earnings of disabled white males aged 45-54 were 40% of earnings for the non-disabled, while disabled black females of the same age earned only 8% of the earnings for the non-disabled -- illustrative evidence again that the compounding of disability with other socioeconomic handicaps is a key factor in apparent wage differences between the disabled and non-disabled.

A number of the more recent studies conducted after The Urban Institute literature review also reaffirm that employers see the handicapped as good workers. Dr. Jerry Zadny of the Regional Rehabilitation Research Institute at Portalnd State University, which specializes in job placement research on the disabled, recently concluded a major survey of employer attitudes.[3] Dr. Zadny surveyed 448 employers in Portland and San Francisco and found that respondents rate the performance of the disabled as being average or above average in comparison to other workers. Dr. Zadny also found that the hiring patterns of employers were correlated with their attitudes, that firms reporting that the handicapped did well were more likely to hire them, and that in general all firms were more likely to hire if approached by a VR agency or other rehabilitation agent on behalf of a disabled client. The major reason for non-hiring or for not hiring more disabled was that disabled people were not being referred to the firm. Similarly, DuPont Company's internal management studies concluded that handicapped workers scored higher than non-handicapped workers in terms of safety, job performance measures, job stability, and attendance records, and that there was no increase in insurance costs.[1] A survey of disabled Vietnam veterans, a large percentage of whom were severely disabled, found that only 17% of the veterans reported any discrimination by employers; individuals reporting such discrimination tended to be the young, poorly educated, and those with the most severe disabilities and, thus, those who might be confusing an employer's realistic assessment of their capabilities with discrimination.[2]

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[1] Cf. V. Schletzer, et al., op. cit. In the survey of 800 personnel managers, only 25% of the managers admitted to prejudice, while they did think the first-line supervisors discriminated against the disabled. Some 50% of the 510 supervisors perceived the personnel managers as discriminating. A huge battery of attitudinal tests found no differences between the personnel managers and supervisors in terms of their stated attitudes toward the disabled.

[2] James A. Colbert, Richard A. Kalish, and Potter Chang, "Two Psychological Portals of Entry for Disadvantaged Groups," Rehabilitation Literature (July 1975).

[3] Jerry J. Zadny, "Employer Reactions to Efforts to Place Disabled and Disadvantaged Workers," Regional Rehabilitation Research Institute, Portland State University, 1979.

The ultimate test of discrimination should be the behavior of employers. Studies of the disabled themselves have fairly consistently shown a very high rate of return to work following illnesses and injuries unless the injury was severe. Jaffe's Columbia survey of 1,300 workers who were disabled in the mid-1950s in the New York City area found that two of three returned to the same employer and 80% of those to the same job, and that a large proportion of the remaining third did return to work though 54% went to new jobs with a lower wage than before the injury.[1] The Syracuse survey for the forthcoming Task Force report on Workers Compensation found that only 11% of some 1,500 workers compensation recipients in the mid-1970s had not returned to work five years later, and again that 72% had returned to the same employer and 75% returned to the same job.[2] Similar statistics were reported in a DOL-funded study of permanently injured workers under Wisconsin's Workmen's Compensation Law. Of the 549 Wisconsin workers injured on the job in 1968, 70% returned to work for the same employer.[3]

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[1] J. Wolfe, "Disability is No Handicap for DuPont," The Alliance Review, National Alliance for Businessmen (Winter, 1973-74). Dr. Joseph Halpern of the Denver Research Institute has found similar patterns in his consultation to the Coors Brewing Company. There may be many such internal, unpublished studies among the major corporations.

[2] Survey cited and data reanalyzed in O'Neil, op. cit.

As noted earlier, studies of the disabled have consistently shown that disability accounts, at most, for only a relatively small proportion of the lower incomes that many disabled people experience. A study of the 1970 Census data found that labor force participation rates were similar between the partially disabled and the non-disabled, although there was an 18% differential in earnings even after controlling for educational attainment.[4] Again, the problem is that the partially disabled are under-represented in professional/technical, managerial/administrative, and craftsman occupational categories, and overrepresented among clerical workers, operatives, non-farm laborers, and service workers. Several different studies by Berkeley Planning Associates have found that the type and severity of disability was a much less important factor in predicting the success of rehabilitation services and post-rehabilitation earnings than were other characteristics like age, sex, race, education and past work history.[1] Indeed, a number of studies would seem to indicate that the attitudes of the disabled worker may be more important than the attitudes of employers in determining employability. Nagi's analysis of work disability using a large array of demographic and socioeconomic characteristics found that all the factors combined explained only 38% of variance in work disability.[2] Berkowitz, even estimating regressions separately for different age, race, and sex cohorts and adding more variables to the usual personal characteristics -- such as area unemployment, the presence of income support, and the person's health and functional limitations -- still explained only half the variance in labor force participation for white and black males.[3] Authors noting these findings frequently cite the need for some measure of motivation or work socialization to improve predictability.

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[1] A. J. Jaffe, Lincoln H. Day, and Walter Adams, Disabled Workers in the Labor Market (Totowa, N.J.: The Bedminster Press, 1964). The study was conducted by the Bureau of Applied Social Research of Columbia University.

[2] Julie Loughlin Makarushka and William G. Johnson, "The Experience of Injured Workers," A Report to the Interdepartmental Task Force on Workers Compensation, Syracuse University, 1977.

[3] Richard Ginnold, A Study of Permanently Injured Workers Under Wisconsin's Workmen's Compensation Law, under grant provided by the Department of Labor, 1978.

[4] O'Neil, op. cit., pp. A. 6-7.

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[1] F. Collignon, R. Dodson, and A. Skaburskis, An Evaluation of the Costs and Effectiveness of Vocational Rehabilitation Service Strategies for Individuals Most Severely Handicapped (Berkeley Planning Associates, Report to the U.S. D/HEW, April 1975) -- part of BPA's submission for the Comprehensive Needs Study; S. Shea, et al. Implementing the Rehabilitation Act of 1973: The VR Program Response (Berkeley Planning Associates, 2 volumes, Report to OS/ASPE, U.S. D/HEW, February 1978).

[2] Saad Z. Nagi, An Epidemiology of Disability Among Adults in the United States (Columbus, Ohio: Mershon Center, Ohio State University, 1975), pp. 12-15.

[3] Monroe Berkowitz, et al., Measuring the Effects of Disability (New Brunswick: Rutgers University Press, 1972), pp. 171-194.

Some injuries and illnesses which remove individuals from the labor force are, of course, sufficiently severe that the person does not return to work. These are the individuals of particular concern for employment policy. Could the employer have taken some action which might have made it possible for the individual to return to the job? A survey of 889 individuals rejected by vocational rehabilitation programs[1] as too severely disabled to justify services found that 12% of the individuals had worked the previous year in spite of VR's diagnosis, and that of those not working, only 20% gave as a primary or secondary reason employers' unwillingness to hire, inflexible job scheduling, or union policies. Some 83% of those not working cited their poor health, not any barriers erected by employers, as the main reason for not being employed. In short, while there remains a major need for program intervention to help an important segment of disabled workers to return to work, the private sector continues to do a major "job" of rehabilitation for many disabled workers without intervention. While this success is principally with the less severely disabled worker and is one that still leaves the disabled occupying primarily marginal roles within the labor force, the success is too often underplayed or overlooked. As previously discussed, growing numbers of private employers are providing rehabilitation programs within their own organizational structure and are increasingly cooperating with various government-sponsored initiatives to improve both the numbers of handicapped indiviudals employed in the private sector as well as the qualtiy of jobs in which such individuals are placed.

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[1] The Urban Institute, op. cit.

JOB MODIFICATION

The literature on first reading indicates that job adaptation is seldom needed for many of the disabled who work, but that when needed, its provision is essential to whether rehabilitation may occur. A survey of disabled Vietnam veterans (a large percentage of whom were severely disabled) found that only 11% of those who held a job in 1973 reported that any special accommodation had been made by their employers. When the types of accommodations that were made were investigated, they proved predominantly to be of the kind which made minimal demands on the employer and which imposed minimal costs.[1] The Civil Service Commission completed a survey in 1970 of their placement of severely handicapped people in the federal government and found that only 15.6% of some 397 persons placed required any job restructuring or work-site modification. The report concluded:

> contrary to the general assumption, the severely handicapped do not usually, or even often, require major alterations in a job situation. When changes are made, they were such incidental things as installing a wheelchair ramp at a building entrance, rearranging desks and file cabinets to improve mobility and accessibility, etc.[2]

The experience of the ACTWU model for involving the union in rehabilitation efforts also found that the majority of modifications required to re-employ an injured worker were minor adjustments and were achieved at relatively minimal cost. The types of job modifications which the union worked out with management involved altering the height of chairs and stools, introducing flexibility into the work schedules of disabled members, using a state interpreter for a deaf man during his initial training period, and transferring a worker with a transportation problem to a shop closer to her home.[1] Similarly, minor adjustments have been made by Sears Roebuck in accommodating a certain number of its disabled employees. The magnitude of these job modifications have involved such minimal expenditures as $300 to alter a specific work site and $3,000 to purchase a talking calculator.[2]

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[1] Wilson, Richards and Berceni, Disabled Veterans of the Vietnam Era: Employment Prospects and Problems (Alexandria, VA: HumRRO Technical Report 75-1, Jan., 1975)

[2] Office of Selective Placement, Civil Service Commission, Report cited in O'Neill, op. cit., p. 7

The importance of job modification as a way of securing new employment opportunities for the disabled is clear. Recent research has found high correlations between the physical requirements of a job and whether the worker will cease working at it when disabled.[3] For example, a survey done of 250 individuals in California with rheumatoid arthritis,[4] a chronic disease that normally is classified as very severe, determined that the social character of the workplace, especially individuals' "centrality" in their job position, was dominant determinant of the probability of diability from the disease. "Centrality" refers to the individual's ability to control the scheduling of his or her work hours and requirements. Individuals who were self-employed or in managerial or white collar occupations, who worked in larger firms, who worked with relatively less supervision (autonomy), who could reduce or flexibly shift their hours of work, were much less likely to become disabled as a result of their health conditions, controlling for education, income, and numerous other personal characteristics. The author concluded that the key to rehabilitation with this particular disease, but probably with many other diseases, was prevention of the disease from leading to disability by working with employers to adapt the job before disability occurred.

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[1] Enteen, *et al.*, *op. cit.*, p. 199.

[2] "Disability is No Handicap." *Pacific Business* 67:6 (November - December, 1977)), p. 15-24.

[3] Harold Luft, *Poverty and Health: Economic Causes and Consequences of Health Problems* (Boston: Ballinger, 1978)

[4] Edward Yelin, "From Social Theory to Social Policy: Social Class and the Epidemiology of Disability: A Case Study among Persons with Rheumatoid Arthritis," Doctoral dissertation, Department of City and Regional Planning, University of California, Berkeley, June, 1979. Later published as "Toward an Epidemiology of Work Disability," *Milbank Memorial Fund Quarterly*.

Unfortunately, these studies which emphasize the importance of job adaptation leave a reader uncomfortable with the facile conclusion of studies (such as the examples cited earlier) that the severely handicapped do not require job modification. The studies which draw that conclusion are based upon surveys of the severely handicapped who are working; they do not probe the needs for job modification of the severely handicapped applicants who are not hired. The data is just as consistent with a conclusion that the severely handicapped only get hired when they do not require significant job modification, since employers may not be prepared to undertake such expense.

Other evidence supports this possibility that the inability to secure job modifications from employers is a major factor in the severely disabled not achieving employment. In a survey of 889 severely disabled individuals rejected as too severe for VR services, the Urban Institute asked the severely disabled who were not currently working (94% of all respondents), what services they thought they would need in order for them to return to work.[1] The most common response concerned the intensity and duration of work -- the need for light work only (62%), reduced work schedule (47.5%), and flexible work schedule (40%). The second most frequent type of responses were classified by the Urban Institute as "prework needs," though clearly some could be provided by employers: transportation (41%), special training or education (39%), ramps and elevators (27%), special equipment (19.5%), attendant help (14%), regular assistance in work tasks (16%). These perceived service needs are instructive since only 20% of respondents had reported on a different question that the employer's unwillingness to hire, union policies, or the employer's inflexibile scheduling was a primary or secondary reason for their unemployment; instead they blamed not working on their general health condition.[1] Perhaps, because job modification is so rarely encountered among employers, the disabled themselves have come not to see it as a reasonable expectation or hope, and thus cite their health condition or disability, rather than their inability to secure job modification, as the reason for their employment problems.

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[1] Urban Institute, op. cit., pp. 308-309.

The reasons why employers may not be forthcoming with job modification may not simply be those of callous social conscience or prejudice. Redesign of the plant to achieve access for a single individual can be expensive. Redesign of a job for an individual that requires new equipment or devices can entail both direct costs and also indirect costs such as upsetting existing work rules or procedures carefully established by union negotiation. Where there is a money outlay, the employer will naturally want to spread any investment cost over several years if the dollar amount is significant, and his inability to do that with internal accounting systems may make him unwilling to undertake the job modification. Where there is a money outlay, the employer will want to recover the investment, and thus it is important that the employee be reasonably expected to stay with the employer for enough years for the investment to be returned.

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[1] Urban Institute, op. cit., p. 301-305.

Where the severely handicapped are older, or have high risks of repeated illness, or are young and inexperienced with the world of work, or are women with prospects of getting married or starting a family, an employer may be hesitant to undertake the investment for fear of job turnover and the inability to regain the investment.

Moreover, job modification is not so simple as it seems. As a leading Swedish authority concluded almost three decades ago, and few specialists in rehabilitation engineering have disputed, efforts to determine the work capacities of groups with various physical limitation and match them with physical requirements for job categories will always lead to a large proportion of incorrect assessments.[1] Instead, the capacities of particular individuals must be matched with particular jobs. Even workers within a narrowly defined disability category vary greatly in their abilities to perform many tasks. Similarly, even occupations narrowly described or defined vary greatly from one plant or office to another and may vary greatly within an office or plant. In short, the employer who is prepared to modify jobs cannot simply use some list to be sure that a given applicant can do the job. Job modification is often a highly tailored effort, not simply the buying of some standard package off a shelf. Only large employers may have the managerial time and resources to be able to undertake such modifications, which may explain why the literature has consistently found that larger firms are more likely to rehire their injured and ill workers. Also, to the extent that there is learning by experience in making job modifications, larger firms by the sheer logic of having more disabled applicants and workers may be better able to reap the gains of experience and reduce the managerial costs of designing new systems.

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[1] Bert Hanman, Physical Capacities and Job Placement (Sweden: Nordisk Rotogravga, 1951). The conclusion of this old classic was supported by BPA's discussions with the rehabilitation engineers in some dozen university research centers funded by the Rehabilitation Services Administration, which Berkeley Planning Associates evaluated last year. The big problem with the utilization of new technologies and aids is that once produced, they still must be modified for the particular case -- a servicing requirement that greatly raises the expense and deters firms from undertaking production of the technologies.

To be sure, not all job modifications require the redesigning of the interface between man and machine, or the adaptation of the machine. Much of the job modification needs indentified by handicapped workers simply takes the form of adjusting hours and work rules. Some have argued that unions are particularly a source of firms' recalcitrance here, with the union insisting on rigid standardization of jobs and job ladders preventing flexibility. Moreover, with seniority protections in contracts, firms have strong incentives to reserve less strenuous jobs for workers with seniority who they cannot fire, thus making the jobs nonavailable to disabled applicants.[1] However, the efforts of the ACTWU and the Human Relation Resources Development Institute of the AFL-CIO described earlier indicate that such broad generalizations may be unwarranted. While unions may have certain reasons for being reluctant to promote the hiring of the disabled, they have an equal number of sound reasons for becoming actively involved in the issue. These reasons include, among others:

- the passage of Sections 503 and 504 might have potentially enormous implications for all employment policies and procedures and therefore will affect labor;
- many union members are already disabled and therefore deserve the attention and support of union leadership;

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[1] Miland E. Knapp, "Employment of the Handicapped," Postgraduate Medicine (July, 1970)

- the reduced health and disability insurance costs and lower disability pension costs likely to result from rehabilitation efforts can help protect union insurance funds from depletion;
- voluntary labor participation in affirmative actions should prevent government intervention and the possibility of new legal obligations being imposed on unions by fiat.[1]

Despite how one eventually views the involvement of labor unions in the future employment of the disabled, it is clear that labor unions are a significant actor in altering the employment policies of those sectors of the economy where unionization is common, such as the industrial sector. One might therefore think that the service sector, which employs more than half the labor force and which tends to be less strictly unioninzed, would provide more opportunity for job modification. Studies have consistently shown, however, that service employers are less likely than manufacturing concerns to rehire injured workers.[2] The problems are again instructive: services more than manufacturing are bound to standardize hours of convenience to the customer or client; there may be fear that customers will be less accepting of changes in routine procedures accommodating particular workers (quite apart from any stigma or reaction the customer may associate with the severely disabled); and service firms tend to be much smaller in size with higher turnover in their work force and fewer capital resources. In short, there remain serious obstacles or at least disincentives even to "soft technologies" of job modification with the service sector.[3]

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[1] Enteen, et al., op. cit., p. 199-200.

[2] Cf. Jaffe, op. cit., Also see Lawrence C. Hartlage, "Factors Influencing Receptivity of Ex Mental Patients," American Psychologist, 21:3 (March 1966), p. 249.

[3] Note the long resistence even by government to job sharing and other approaches advocated to make jobs available to women with family responsibilities who can't or don't want to work 40-hour weeks.

What then are the outside resources an employer can turn to? There are programs such as Vocational Rehabilitation or those sponsored by the Veterans Administration which can help pay the costs of job modification for indiviudal or even groups of workers. Those programs have long been critiqued, however, for working principally with the client and not actually reaching out to employers or trying to do placement. Their services historically have focused on job training and counseling, not job modification. There are tax credits in California and for the past year nationwide for building adaptations for access for the disabled, but no tax incentives for equipment adaptation other than normal depreciation. There is no outside public resource to turn to for no-cost job engineering assistance. Rehabilitation counselors certainly have no such training, and the few rehabilitation engineering centers that have been funded are forbidden by regulation from offering fees for services and, in any event, have been encouraged by Federal policy to focus on medical rather than vocational technologies. The State Job Services have, in the past, allocated staff time and resources to provide technical services to firms to assist them in analyzing and restructuring jobs. The objective of this assistance was to aid employers in making better use of their workforce, reorganizing production processes, and increasing job satisfaction for workers. WHile not specifically designed to assist handicapped job applicants, the results of this type of assistance often did increase jobs for certain segments of the disabled population. However, because of the increasing need to focus Job Service resources on placement, technical services have been de-emphasized in many areas and are no longer provided at all in some offices.[1] Therefore, job modification when it occurs is through the good will or financial self-interest of the employer.

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[1] Placing Handicapped Applicants: An Employment Service Handbook, p. 45.

This lack of outside sources to pay the costs of job modification heightens the importance of the critique posed by Levitan and Taggart at the beginning of this section. If there is significant unemployment or many new workers entering the labor force, (e.g., youths and, more recently, women) and the employer can choose among many applicants for a given job, why should the employer go to the trouble of job modification so that a severely disabled applicant can be employed? The affirmative action requirements for the handicapped if enforced may thus create an important change in the incentives of employers.

We have mephasized job modification first among the four key barriers cited by the government, because we perceive that it indeed may be key in permitting more of the severely disabled to become productive members of the labor force. As we have indicated, employer incentives, capabilities, and attitudes toward job modification may be a major factor in hiring practices. Job modification may also be the key to making the severely handicapped currently not in the work force of comparable productivity to other workers. It woud be highly valuable to policymakers and program planners for the disabled if Berkeley Planning Associate's proposed research provides answers to the following questions:

- What reasons do employers give for not modifying jobs?
- Do employers know where they can go for help (financial, technical assistance) on job modification?
- Are employers more likely to modify jobs for their workers who become injured or ill than for outside job applicants?

Similarly, is greater consideration given to workers who are injured on the job than for workers who become disabled off the job?

- Are some employers more willing or likely to undertake job modifications than other employers and what factors (i.e., size, potential growth of the firm, type of firm, etc.) seem to affect this decision?
- What kinds of job modifications are currently being undertaken for what kinds of disabled persons? How do job modifications vary for the mentally retarded, the physically handicapped, and the disfigured, and for those who combine these disabilities with poor education?
- Do employers perceive that their jobs can be modified for severely handicapped persons and can these jobs, in fact, be modified? What are the potential costs of such modifications?
- Do employers consider the feasibility of job modifications in hiring decisions?
- Are employers concerned about the reactions of unions or co-workers or customers to resulting changes in schedules or work flow?
- What problems for productivity would the "soft technologies" of more flexible hours and scheduling actually create?
- Are the new Section 504 requirements increasing the willingness of employers and other actors in the hiring process to undertake job modifications?
- How might employers respond to alternative tax incentives, affirmative action enforcement, and the availability of public help (monies, technical assistance) which seek to encourage job modification?

- What are the costs and benefits of having the government pay for job modification, as compared to our current income support and rehabilitation programs for the disabled, or as compared to affirmative action enforcement?

WORK PRODUCTIVITY

A second major concern of the Government is the relative work productivity of the disabled as compared to other workers. As previously noted, the existing literature appears to show both that the disabled who are working are as productive in their jobs as their co-workers and that employers perceive the handicapped as being comparably productive. There are questions as to whether or not the disabled do impose greater costs. In addition to those costs relating to the need for job modification or fringe benefit insurances, are other costs which should be explored in the same context as productivity. These include absenteeism, job turnover, tardiness (because of transportation, attendance care, and problems related to disability), inflexibility in being able to move from one job to another or across space on an unscheduled basis, and greater need for supervision. The literature is also mixed concerning these costs. Some studies show employers do not perceive some of these costs to exist for the disabled; other studies show the reverse. Some studies using actual records show the disabled to perform no differently from other workers in terms of these costs; other studies show the disabled to be more costly. Interestingly, we found no studies which suggested that these costs, if they did exist, were very significant in magnitude. We did find studies consistently showing that employers were dubious about job advancement for the disabled, and that the disabled tended to be placed in marginal jobs.

A series of research efforts conducted by the Michigan Bell Telephone Company have focused on both the productivity of a sample of handicapped employees and the advancement of handicapped employees within the firm's management system. The first study rated both handicapped and non-handicapped workers who had been employed for six months on a number of job-performance measures, including quality of dependability and safety, job and company knowledge, and attendance and tardiness.[1] The study found that handicapped workers had "significantly" better attendance than their non-handicapped counterparts. Handicapped workers missed fewer work days and were late fewer times during the first six months than the non-disabled workers. On all other dimensions, the populations were similar. In the second study, MBT looked at the rate in which handicapped persons were promoted relative to their non-handicapped counterparts.[2] Again, both the handicapped and non-handicapped groups demonstrated similar rates of promotions (roughly 20%), demotions (roughly 4%), and retention of the same job (roughly 50%).

Research efforts compiled by the National Association for Retarded Citizens[3] conclude that almost 95% of the mentally retarded individuals in the United States are capable of successfully maintaining a job providing such individuals are given proper training and on-the-job supervision. Of the 12,000 mentally retarded individuals receiving job training since 1966,

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[1] Michigan Bell Telephone, A Comparison: Handicapped Versus Non-Handicapped Employees At Six Months On-The-Job, Personnel Research, MBT, November, 1977.

[2] Michigan Bell Telephone, A Comparison: The Advancement Within MBT of 1974, 1975, and 1976 Handicapped Hires Versus Non-Handicapped HIres, Personnel Research, MBT, March, 1978.

[3] "The National Association for Retarded Citizens: Mentally Retarded Persons in the Open Market," Personnel Journal, 56:5 (May, 1977), p. 238-239.

85% have been retained by their employers as of 1977. In categories of work attendance and punctuality, respectively, 42% and 27% of the workers surveyed rated as high as other workers, while 44% and 51% were judged to have a better performance record on these two indicators than the non-retarded workers.

It should be remembered that thorough productivity studies have been done before when the government was prepared to spend the resources. The classic study was that of the Department of Labor in 1948.[1] The employment records were examined of 11,00 impaired and 18,000 carefully matched unimpaired workers throughout the country. Impaired workers had slightly higher productivity rates (1%) and fewer disabling conditions (8.9 injuries per million exposure hours on the job compared to 9.5 for unimpaired workers). The two groups had identical nondisabling injury rates. Impaired workers had slightly higher absenteeism rates (3.8 days per 100 scheduled work days compared to 3.4) and somewhat higher voluntary quit rates (3.6 per 100 employees compared to 2.6). Especially interesting was the fact that impaired workers had considerably higher involuntary termination rates (firings). The Department of Labor attributed this to the postwar practice of firing disabled workers (as women were also fired) to accommodate returning able-bodied veterans. In short, when the country really needed even the severely disabled in order to maintain production, it found ways to modify jobs and use them.

While the 1948 study was clearly comprehensive, it does have some limitations in terms of the applicability of its methodology now. Most importantly, services -- not manufacturing -- are the dominant and growing source of jobs in the American economy. For better or worse, it is services which probably would have to provide a large share of any new jobs to the currently unemployed severely handicapped. Yet the measurement of productivity in services is a general problem perplexing economists and managers. We simply have a limited number of measures and very little consensus on their quality. Other cost issues could of course be still analyzable, but it will be different to compare productivity for the disabled and non-disabled, when we are unable to define productivity for the non-disabled. While specific measures for productivity in the service sector are elusive, one might want to consider the overall satisfaction of the individual's supervisor as a proxy for productivity. If the supervisor is pleased with the employee's work and feels that the assigned tasks are done on par with the non-disabled employee, this might suggest that both the disabled and non-disabled were equally productive. For example, Project Skill, the DOL funded demonstration project discussed in Section I, found that the mentally retarded and restored emotionally ill individuals placed in trainee positions with various State offices were found to be "as productive" as their non-disabled counterparts. In general, supervisors expressed complete satisfaction with the Project Skill clients, adding that they adjusted to their jobs just as rapidly as the non-disabled trainees recruited through regular channels.[1]

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[1] U.S. Department of Labor, The Performance of Physically Impaired Workers in Manufacturing Industries (1948).

The kinds of questions which future research into the productivity of the disabled should address include:

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[1] U.S. Department of Labor, Project Skill: Strategies and Techniques, op. cit., p. 4.

- Do employers monitor their workers' productivity and use such information for guiding future hiring decisions?
- How do the severely disabled compare to the non-disabled (or the general work force) holding comparable jobs in terms of:
  - -- productivity,
  - -- absenteeism,
  - -- promotion,
  - -- job turnover or quit rates,
  - -- new injuries or disabilities on- and off-the-job,
  - -- involuntary termination or firing rates,
  - -- wages,
  - -- other associated costs?
- Can differences in productivity or related costs be explained by other characteristics besides disability (e.g., age, sex, education, past work experience)?
- What are employer perceptions of the productivity, associated costs, and advancement prospects of the severely disabled?
- How does relative productivity to the non-disabled vary among the mentally retarded, different disabilities among the physically handicapped, and those whose disability is compared by poor education?
- Do the severely handicapped for whom relative productivity data is available appear comparable to (1) the severely handicapped searching for work but unemployed, and (2) segments of severely handicapped not in the labor force?

FRINGE BENEFITS

The issue of fringe benefits, as it relates to the proposed research effort, consists of two distinct, but related, components: (a) what fringe benefits are provided handicapped employees by employers, with what gaps and overlaps in coverage? and (b) do fringe benefit costs deter employers from hiring the handicapped?

As we have noted, the literature on fringe benefits actually received by the handicapped is meager. In one of the first disability studies to begin exploring the fringe benefits received by the disabled as part of their job compensation in the early 1970s, researchers found almost nothing in the literature which was empirically descriptive of the actual experience of the handicapped.[1] Subsequent surveys of Vocational Rehabilitation clients which asked specific questions about the client's fringe benefits during employment found that the common practice of assuming the employed disabled received fringe benefits at the same rate as other workers, the practice common in the literature, appeared inappropriate.[2] Lower percentages of the disabled reported receiving disability and health insurance than one would anticipate from data for the general labor force. As these studies concluded, this lower rate of fringe benefit compensation was most likely due to the fact that even the successfully rehabilitated VR clients were heavily lodged in low paying jobs of the kind normally classified as in the secondary labor market. It was not clear that the fringe benefits received by the disabled were in fact less than other workers (in those types of jobs or with those types of employers) were receiving. The latter kind of appraisal, as well as validating the reports of the disabled, required surveys of the employers, not merely the disabled workers.

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[1] Cf. Frederick Collignon and Richard Dodson, A Benefit-Cost Analysis of Vocational Rehabilitation Services Provided to Individuals Most Severely Disabled (Berkeley Planning Associates, Report to U.S. D/HEW, April 1975), and Ronald Loshin and Frederick Collignon, Discussion and Survey of Benefit-Cost Studies of Vocational Rehabilitation (Berkeley Planning Associates, Report to U.S. D/HEW, April, 1975).

[2] Abt Associates, Inc., The Program Services and Support System of the Rehabilitation Services Administration (Cambridge, Mass.: Report to Rehabilitation Services Administration, 1974) - see sections on benefit-cost analysis Urban Institute, Comprehensive Needs Study -- the Institute has not published the data on fringe benefits, because the number of severely handicapped workers found to be employed were too few to generate generalizable data. Other data sources for fringe benefit coverage potentially include the JWK national survey of Vocational Rehabilitation clients which after some four years, still is awaiting permission to go into the field.

More recently, the national surveys that were undertaken as part of the Interdepartmental Task Force study on Workers Compensation have provided an important new data base on the fringe benefits offered by employers and received by disabled workers. The information with regard to workers is limited to Workers Compensation claimants and recipients, a quite different population than that of disabled people currently working or applying for jobs. Nonetheless, the surveys have produced some general insights into the gaps and overlaps among fringe benefits in general, insights which were distilled for the Interdepartmental Task Force by the Task Force's chief consultant on integration of health and disability insurances.[1]

Halpern's study, which synthesized and reanalyzed data from the National Conference Board, from a Westat survey of 6000 firms (that unfortunately only got a response rate of 33%), from the Cooper & Company survey of 1036 individuals with closed Workers Compensation claims, from the Syracuse University follow-up survey of severely impaired Workers Compenstion claimants five years after injury, and from Nagi's Ohio State nationally representative probability sample of 6493 citizens, found that the provision of key insurances was now more widespread than in the past in the private sector, but that the benefits provided by the insurances were much less than apparent on the surface because of overlaps. About 25% of respondent firms had disability retirement or group long-term disability, while 50% had major medical coverage and Accident and Disability insurance (A&D), the latter usually as a rider to the pension plan when a pension plan existed. This prevalence of insurances, while much better perhaps than a decade ago, is still much less than the prevalence which has been indicated by the National Conference Board and other industry groups. The latter surveys, which are generated by industry on a voluntary basis and have been the chief source cited in most studies (in part because they were the only available source), have indicated long-term disability coverage of 67% of office employees, 45% of plan employees, and 81% of managerial employees.[1] The difference is probably due to the fact that the National Conference Board overrepresents larger corporations in their sample, while the Westat survey included a fair number of smaller firms (though small firms were still highly under-represented). Most of the long-term disability plans and a high proportion of the A&D riders have offsets (commonly 100%) against Workers Compensation and frequently other public income maintenance insurances (principally Social Security), such that the degree of income supplement provided by these private plans to Workers Compensation and Social Security when a worker becomes disabled is usually meager at best. Most problematic is that employers in small firms are frequently unaware of these offset provisions and their implications, and perceive that they are providing more income maintenance insurance to their employees than is the case. For many of the standard LTD and A&D insurance packages -- those not the result of collective bargaining, for example -- the offset in fact may mean the employee has almost no private supplement to his or her publicly provided or required insurance coverage.

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[1] Joseph Halpern, "Program Interrelationships and Program Coordination in Workers Compensation," Report prepared for the Interdepartmental Task Force on Workers' Compensation, U.S. Department of Labor, Jan., 1977.

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[1] Cf. Bureau of National Affairs, Employee Health and Welfare Benefits, PFP Survey No. 122 (Washington, D.C., July, 1978).

The surveys of Workers Compensation claimants independently supported the conclusion that the supplemental income provided by the packages were minimal. In the Cooper and Company survey, only one of the 73 permanent total disability cases reported receiving benefits from a permanent disability pension and only three received long-term disability benefits. Only seven out of 107 cases of accidental death received benefits from Group Accidental Death programs. Indeed, of the total sample of more than 1000 closed claims, half received no benefits other than Workers Compensation and only 34 people received any short-term disability. In the Syracuse University follow-up of severely impaired claimants, only 156 of 1918 respondents reported any current income from private pensions. The Nagi nationally representative sample found only two people who had received benefits from a union or private disability plan as well as from Workers Compensation (0.03% of the national population and 1.7% of those who received Workers Compensation payments). Nagi's study did find 19 other people who had not received Workers Compensation but had received some payment from a disability pension; thus only 4.9% of those citizens presumably injured or ill on a job and who had contacted Workers Compensation received any payment from private disability insurances.

The Halpern study identified a number of additional problems for which more information might well be collected as part of future studies. It is widely suspected and there is some evidence that small firms in significant numbers may have dropped their private pension plans when ERISA was legislated.[1] Since for many of these firms, the A&D riders were part of the pension plans, there may be a decline in short-term accident and disability coverage as well as LTD coverage. The Halpern analysis found that company major medical and health plans which were not negotiated as part of collective bargaining agreements, especially in smaller firms, did not cover pre-existing conditions. For a worker who begins employment in a disabled situation, his or her health coverage might therefore prove very inadequate for subsequent medical needs, unlike other employees. The integra- between unemployment insurance and Workers Compensation was also unclear. If a person is disabled but not willing or able to go to work, he or she is theoretically ineligible for unemployment income maintenance. However, the Workers Compensation Surveys found a number of disabled workers who were receiving Workers Compensation and unemployment insurance. The explanation for this phenomenon is unclear. It could be that disabled workers negotiated lump sum settlements with the insurer, and then found themselves subsequently able to go to work but without jobs. Whether insurers would make such settlements if they diagnosed the workers as being able to return to work shortly is unclear. In any event, the survey findings indicate a need to understand better the integration of unemployment insurance with other income maintenance insurances for disability.

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[1] For example, GAO audit has estimated that 18% of pension plans with fewer than 100 participants were terminated following ERISA, based on a survey in 1977. The audit, based on 467 firms, did not find a major variation in termination rates by size of firm, however. Unfortunately, the audit looked at basic pension benefits and vesting only, not at the disability elements in the plans. U.S. General Accounting Office, Effects of the Employee Retirement Income Security Act on Pension Plans with Fewer than 100 Participants (Report by the Comptroller General to the U.S. Congress, HRD-79-56, April 16, 1979).

As these examples make clear, the area of the private sector where the gaps and overlaps in insurances is most unclear is with small firms. They presumably are less able to afford sweeping coverage. They have less management resources to devote to negotiating and monitoring the details of their insurance packages. They have less negotiating power with insurance firms. Berkeley Planning Associates, for example, is a research and sonsulting firm with a relatively high proportion of disabled staff in its employ. Until the firm reached certain size thresholds (usually 25 employees), it was almost impossible to find insurance companies which would offer long-term disability and major medical health packages which would cover pre-existing conditions or indeed cover staff who were disabled or had past histories of serious illness. This difficulty was confronted even by a firm which was aggressively trying to find such coverage. Ultimately a disability plan was negotiated with rates more than three times the going market rates for such insurance packages, and which still excluded pre-existing conditions. Growth beyond those threshold sizes (and possibly the rapid increase in health maintenance organizations and plans) have solved such problems, but Berkeley Planning Associates' own experience is indicative of the difficulties that even a conscientious small business employer can confront. It is probable thus that for many small firms, the costs of insurance may deter employment of the disabled or at least that disabled workers will not be receiving the same insurance protection as other workers. Unfortunately, the ability to gather information on these topics from small firms is particularly limited. The Westat mail survey and extensive phone follow-up got a total response from all firms of only 33%;

response was much less for small firms. Moreover, a high proportion of small firm managers who responded appeared to be ill-informed on their own insurance packages, so far as independent validations of coverage could determine.

Quite apart from the formal coverage of plans is the question of what the implications become for the disabled. While the Halpern study did not indicate that there were differences in policy conditions for disabled versus non-disabled workers in terms of maximum benefits, length of service required for eligibility or amounts of benefits, the different patterns of morbidity for disabled and non-disabled workers could create major differences in the fringe benefits actually received. If the disabled are more prone to illness arising outside work than the non-disabled, the exclusion of pre-existing conditions from medical or disability plans obviously has profound implications. If the disabled should prove to have higher injury rates on the job or have a higher vulnerability to job-related illness, then length of service requirements for eligibility or levels of benefits might become particularly important in determining the benefits that a disabled worker is in fact likely to receive.

Most important and not broadly discussed in the literature is the issue of disincentives for a severely disabled individual in accepting private employment. To the extent that Medicare and Medicaid provide substantial protection against health care expenses, a severely disabled individual who leaves the public system of protection to enter the private system of protection provided by employers may be incurring a major risk. With the exclusion of pre-existing conditions, with length of service requirements for eligibility, with maximum benefit levels and levels varying by length of service, a severely disabled worker who becomes ill after taking employment loses major protection against health care expenses.

Moreover, for some types of severe disabilities, the ongoing costs of health care, attendant care, and other needs related to the health condition are substantial. For quadriplegics, the Center for Independent Living in Berkeley has estimated such costs to exceed $12,000 a year. It would take a job of major salary to provide the income to offset the loss of subsidies for those costs which are currently provided by Medicaid, Title XX, and related public programs, quite independently of whether new illness occurs. Berkeley Planning Associates is concluding an investigation for OS/ASDE of the disincentives posed by these kinds of public Insurance benefits in the Social Security Disability Insurance Program, involving a survey of 320 SSI and SSDI recipients who are eligible for rehabilitation services. Concerns about earning enough from a job to meet expenses was the key disincentive to obtaining regular employment cited by the respondents. Sixty-one percent of all SSDI respondents and 59% of all SSI respondents provided a positive response to this question.[1] "The choice to work, for a disabled individual receiving SSI or SSDI benefits, can reduce economic well-being. Earnings (before taxes or other deductions) of only $280 per month are sufficient to cancel eligibility for monthly benefits of as much as $700 or more."[2] The report goes on to mention that this lost eligibility can also mean the loss of medical coverage and other in-kind benefits tied to SSI or SSDI eligibility which can be critical to disabled individuals. In the case of health insurance, the lost benefit may be impossible to replace in the private sector at any price. Other features of the benefit structure and rules can further aggravate this situation: in general, employment-related expenses, even those arising directly from the disability, are not discounted in determining whether a disabled individual's earnings are sufficient to eliminate eligibility for SSI or SSDI. Because of the disincentives to work built right into the SSI and SSDI benefit structures, recipients who are expected to become clients of VR and go to work are being asked to make an irrational decision.

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[1] Susan Shea, et al., The Client Perspective of Performance: Beneficiary Rehabilitation Programs. Draft report prepared for the Assistant Secretary for Planning and Evaluation, DHEW, December, 1979, p. 17.

[2] Susan Shea and Richard Dodson, Establishing Policy in the Beneficiary Rehabilitation Programs. Draft report prepared for the Assistant Secretary for Planning and Evaluation, DHEW, December, 1979, p. 6.

Citing corporate experience, Berkeley Planning Associates has occasionally encountered the disincentive with severely disabled individuals whom the firm has sought to hire for its regular staff. Individuals are prepared to work as consultants where employment need not be routinely reported in government-required submissions by the company. They do not want regular employment status even though they could be working 40 hours a week unless they can be guaranteed long-term employment security, because they can't afford to give up their Medicaid/Medicare health coverage and other benefits. If such disincentives arise for professionals with salary expectations of $15,000 a year or higher, the disincentives are likely to be much stronger with less skilled individuals who can at best not expect more than average levels of income.

The kinds of questions that the proposed study might well explore concerning fringe benefits, therefore, include:

- What are the overlaps between Social Security disability coverage, unemployment insurance coverage, and private fringe benefits in terms of income maintenance in the event of injury and illness, both sustained on- and off-the-job?

- Are there differences in coverage and other fringe benefit conditions (e.g., maximum amounts, length of service required for eligibility, or amount of benefit) for disabled and non-disabled workers who enter a company's employment? Does coverage change for a worker who becomes disabled while in the company's employment but subsequently returns to work?
- What implications do differences in policy conditions have in practice for disabled who do become ill or injured while in employment (i.e., if new illnesses occur, is their timing such that policy conditions result in the disabled in fact receiving less income support or medical reimbursement than other workers?)?
- Are there differences in coverage that relate to particular kinds of disabilities?
- What variations in the cost of insurances are confronted by employers who hire or rehire the disabled? Do differences in cost confronted by the employer actually reflect the differences in cost experienced by the insurers?
- What kinds of coverage and reimbursement is made available to the disabled under private employer health and major medical plans? How frequent is the exclusion of pre-existing conditions?
- Are there differences in health plan coverage for disabled and non-disabled workers entering employment for firms? Does

coverage change for a worker who becomes disabled while in the company's employment but returns to work?

- Are there systematic differences in fringe benefits between firms of varying size, of varying risks associated with employment, or differing patterns of unionization?
- Are employers informed of what their fringe benefit plans really offer?
- Do employers consider fringe benefit costs in making hiring decisions?
- What are the incentives and disincentives for the disabled to accept employment created by the different benefits under public and private insurance plans?

HIRING PRACTICES

The government's ultimate concern in soliciting this work is understanding the hiring practices of private sector employers with regard to the severely disabled. We have discussed job modification, work productivity, and fringe benefit costs and coverage first, because those factors are likely to be major determinants of hiring practices to the extent that employers make their decisions on the basis of true economic calculations. Similarly, fringe benefit coverage and the probable wages the disabled will expect should be a major influence on the behavior of the disabled in seeking employment and trying to maximize income. There are, however, a number of other factors -- some rational and economic, others less rational -- which may considerably affect hiring practices.

First, there is the serious issue of employer attitudes, perceptions, and possibly prejudice. If employers don't understand the true economics of hiring the disabled (which may be supportive or non-supportive of their hire), they may make irrational decisions. If employers have attitudes such that they feel personally uncomfortable in the presence of different kinds of disabilities, or if they believe that customers or co-workers may feel uncomfortable, their willingness to hire may be affected. (Nor if customers and co-workers are uncomfortable would employers' actions necessarily be non-rational or uneconomic to the extent that sales or overall firm productivity would be affected by these feelings of discomfort. Such rationalizations have of course been encountered often over the past few decades in equal opportunity struggles for minorities and women.) If employers perceive that the handicapped do not have good career potential or are incapable of flexibly responding to the needs of firms for unscheduled shifts in tasks or location during the work process, the employer may feel hesitant to make the investment in hiring a disabled applicant rather than some other applicant. If hired, the applicant may be assigned only to jobs offering limited potential for advancement, marginal income, and perhaps insecure tenure. As Levitan and Taggart pointed out, in our quote at the beginning of Section II, attitudes may non-rationally but still quite effectively determine behavior. The proposed study would ideally measure attitudes and perceptions, their validity in terms of the actual capabilities of the disabled and the reactions of other co-workers and customers, and finally the effect of attitudes on behavior. Many people in spite of prejudice and negative attitudes continue to behave in non-discriminating ways because of moral compulsion, good manners, economic self-interest, and/or fear of punishment or social disapproval. We should avoid inferring that poor employer attitudes necessarily lead to discriminatory hiring practices against the disabled, until we actually determine that the disabled are not hired for jobs that they could do as well and for comparable costs as other non-disabled applicants.

Because we have discussed at length in earlier sections the problems the disabled may encounter in employer attitudes and in the process of seeking work and advancing on a job once hired, we shall abbreviate the current discussion. There are a few hiring issues, however, that have not been noted before, which we think should receive attention during the current study.

This study could provide an early opportunity to determine how the implementation of Section 504 is influencing employer behavior. The common perception among those working with employers is that firms are frightened of the implications if the Federal government were to begin enforcing affirmative action of the handicapped, because they fear that affirmative action would impose potentially much higher costs than were experienced with minority and other workers. At the same time, until they perceive that the government is going to be monitoring and taking a hard line of enforcement, firms are either ignoring the new regulations or making superficial efforts to comply. However, the experience of the Title III Special Projects, as discussed in the previous Section, indicate that employers are beginning to pay attention to this issue and that such concern can be capitalized on through presenting employers with an effective training and placement program. Since employers are aware of their obligations to step up their affirmative action plans for hiring the handicapped, they are particularly receptive to considering applicants which have been screened and often explicitly trained for their company by Projects With Industry programs and other similar ventures.

A key problem in judging the fairness of employers' hiring practices for the disabled, especially the severely disabled, will be the problem of separating out the effects of disability from compounding problems of socio-economic handicap. Many of the severely disabled currently not working have not worked before. They provide not only problems of functional limitation, but also the problems of work socialization that undermined much of the efforts to improve employment opportunities for the poor in the 1960s. Individuals who have no work history, especially when they have lived in highly sheltered environments and been taught role models of dependency, may have a difficult time in learning to make arrangements to get to work on a timely and regular basis, remaining on a fixed work schedule during the work day, developing satisfactory relationships with co-workers and supervisors, knowing how to accept orders in some contexts and being self-reliant and taking the initiative as a worker in other contexts, and so on. A number of studies which have looked at both the disabled as well as the economically disadvantaged seeking employment have found that the failure of these groups to obtain and retain regular employment is due not only to a general lack of skills and appropriate training, but also to a lack of awareness regarding what types of conduct are associated with "being employed." For example, Miller and Oetting (1977)[1] administered a checklist to 409 economically and vocationally disadvantaged persons in the

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[1] C.W. Miller and G. Oetting, "Barriers to Employment and the Disadvantaged," Personnel and Guidance Journal 56:2(1977), pp. 89-93.

Denver area which probed for those items perceived by the respondents as being the major barriers to employment. While lack of adequate job qualifications was perceived as a major barrier, interpersonal conflicts, legal and financial problems, and emotional and personnel problems were frequently cited as limiting an applicant's potential chances for securing employment. In his work with psychiatric clients, Gerber (1979) identified a number of behavior problems as needing to be addressed if a job placement was to eventually produce a long-term success. "It is well known that functioning on the job breaks down for such clients (psychiatric patients) because of personal grooming, punctuality, attendance, frustration, tolerance, conformity to rules, attention span, inappropriate behavior, relatedness to supervisors and peers, and problems in recognizing the requirements of the work organization structures."[1]

These kinds of concerns are often insulting to the disabled activist, but they are legitimate problems which most of those who have worked with vocational rehabilitation recognize. Mostly, they are problems not associated with disability, but with youth and inexperience in social and work settings. Partly, however, they are problems which are associated with the "games" and roles that some disabled are taught by their professional helpers, by their families, and by others they encounter; breaking down such roles is the core of the so-called independent living movement among disabled activists (as distinguished from the independent living concerns of some policymakers and professionals for whom the phrase principally means deinstitutionalization and a change in the degree of dependency.)

We have focused here on the problems of work socialization that are probably well proxied by past work experience. There are other compounding social handicaps as well -- older age, education/training, sex, race -- that need investigation. Some of these factors independently affect the costs to an employer of hiring a person, some affect the person's probable productivity independently of functional limitation; some are further stimulants of prejudiced reaction.

A particularly significant factor which affects employer attitudes, as well as every other aspect of the employment process is the fact that the severely disabled are not simply a monolithic group. The capabilities for doing various jobs vary dramatically depending on the type of disability and its associated functional limitations. Quadriplegia, blindness, deafness, serious heart conditions create quite different employment problems. Similarly, the problems of physical disabilities are vastly different from the problems associated with mental handicaps. Again those working with government sponsored employment problems note that employer attitudes toward the mentally retarded differ from their attitudes toward the physically handicapped, with the later group being perceived as more trainable and better producers.

Another major interest requiring separate analysis and sample design is the variation of hiring practices across economic sectors. It seems especially important that the study try to find a way to survey employment practices in the service sector. This is the fastest growing sector in the economy over the past two decades and will probably continue to be the fastest growing sector in spite of energy cutbacks and Prop 13-type tax limitations. Most past studies of employer practices have focused on manufacturing, where work requirements are more capable of being specified and measured. The services in contrast create major problems potentially for hiring the handicapped. Face-to-face contact with customers is much more common, and thus the attitudes and prejudices of the general public become more influential on productivity. The nature of service provision may more frequently require cognitive skills and flexibility in thought and action while interacting with a client -- a problem for the retarded. Employers more often are small and have limited capital for job modification. The production process is not capital intensive so tax incentives for equipment modification and investment have less impact on employer behavior. However, tax incentives, such as the Targeted Job Tax Credit Program, are available to all those who hire a disabled individual regardless of the type or nature of the work. Some of these problems may be exaggerated, since the services sector also includes laundries, insurance companies, and other activities where many jobs involve menial chores or clerical work. If the Mcdonald's model of mass production of service provision becomes more broadly adopted, as some economists have urged, the kinds of jobs may not be that much different from manufacturing (except that they won't pay as well). In any event, it is important that the proposed study give the service sector proper attention as the dominant employment sector, even though response rates will invariably be lower and the information generally more difficult to collect than with larger firms.

Finally, the total study effort provides an opportunity to consider new program or policy options that might further the employment of the disabled. It will be interesting, for example, to determine whether firms make any effort to recruit the disabled and how the disabled come to hear of jobs and make application. Most jobs of course are found by word-of-mouth. A major change has occurred in the past decade among the disabled in the sense of increasing organization both of those trying to help the disabled and the disabled themselves. It will be interesting to see to what extent such organizations have started becoming referrants of the disabled to the employer, advocates of hiring for particular individuals, and the provider of supports to the disabled person once hired. Dr. Zadny's research at the Portland State Rehabilitation and Training Center, a national research center on job placement of the disabled, has found that group peer support and mutual provision of job leads is the most effective "strategy" of job placement among the disabled, and is more effective than traditional job counseling and referral. Zadny's research also indicates that direct advocacy by VR counselors or by other organizations is highly effective in getting a disabled person hired, but that such intervention is rare. If sustained on a larger study basis, this finding could suggest the desirability of some very different service strategies within vocational rehabilitation programs. It might for instance prove true that independent living centers such as have sprung up in California and many of the major metropolitan areas have a major role to play in employment of the severely disabled, quite apart from their roles as providers of social service. This study could build on the experience of other programs like the Projects With Industry in providing evidence concerning the alternative effectiveness of public relations efforts to encourage employers to "Hire the Handicapped" versus strategies like affirmative action enforcement, the provision of hard information on the productivity of the disabled and/or tax incentives and wage subsidies to entice the employers to hire more of the severely handicapped.

In summary, then, questions posed by this section of the study include

- Do employers do any outreach asd part of their hiring? Could any of that outreach be influenced to include the disabled?
- What factors do employers appear to take into consideration when deciding whether to hire the disabled, and are these factors based on valid information?
- What are the attitudes and perceptions of employers concerning the handicapped and their productivity, career potential, flexibility on the job, reactions from customers and co-workers, etc.?
- Do hiring practices and employer attitudes and perceptions vary for different types of disability or for disability when compounded by other social handicaps?
- Do attitudes and practices of employers with regard to the disabled with social handicaps vary from attitudes and practices with non-disabled individuals who suffer the same social handicaps?
- Who makes the hiring decision for employers, and what is the process by which individuals get hired and advanced? Are there factors in that process which discriminate against the handicapped?
- To what extent are the severely handicapped when hired being placed in specially selected or designed positions, rather than successfully competing for general job openings in the economy?
- Are there systematic variations in employer practices in hiring the handicapped by type of industry, size of firm, or unionization?

- How have firms responded to the new Section 504 requirements? Are they expecting or experiencing enforcement? Have they changed any practices since the legislation?
- What are the leverage points for policy of public program intervention in trying to expand employment of the severely handicapped?

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EMPLOYMENT PROBLEMS OF PHYSICALLY DISABLED PEOPLE:

A REVIEW OF THE BRITISH LITERATURE

By

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April, 1980

(Commissioned by Berkeley Planning Associates)

INTRODUCTION

The original brief for this paper was to provide a literature review of the British research and experience with regard to the employment of physically disabled people. The subsequent examination of the available published material revealed a conspicuous lack of research into the specific employment issues such as job adaptation, hiring practices and work performance of disabled workers. The bulk of the literature is concerned with emphasising the inadequacy of the exisiting provision of services for the disabled and the urgent need for further research into the specific employment problems of the disabled. The general trend is towards stimulating discussion and encouraging re-examination of the existing problems. This tendency is clearly reflected in a document published by the Department of Health and Social Security (DEPARTMENT OF HEALTH & SOCIAL SECURITY, 1978) which also provides an appropriate framework for the review of the current British literature on this subject. This document, presented as a discussion paper, sets out the major employment problems faced by the employers and the disabled employees. Thus the main problems encountered by the employer are:

- fear of possible low productivity
- limited information with regard to the productive potential of disabled workers
- prejudice
- extra costs involved in adapting machinery, premises, etc.

The disabled worker, on the other hand, is faced with the following problems:

- lack of confidence
- low level of skill
- lack of information regarding job opportunities
- limited physical and occupational mobility
- low income, particularly in the case of certain jobs which are traditionally associated with the disabled
- lack of incentive in comparison with the level of social security benefits.

The aim of the present paper is to investigate these issues with reference to the existing publications and research findings. The following sections present this review of the current British literature on the employment of the physically disabled under the appropriate headings.

LEGISLATION

The 1944 Disabled Persons (Employment) Act established two currently controversial systems - the register and the quota. The former refers to a voluntary registration of disabled people seeking employment; the latter refers to a system aiming to help disabled persons obtain and keep a job. Under the quota system firms employing 20 or more persons have a duty to employ 3% registered disabled people. If they are below the quota they may not employ an able-bodied person without a special permit which should only be granted in cases where no disabled applicant qualified to do the job is available. This system has been criticised for a number of deficiencies. Greaves and Massie (GREAVES & MASSIE, 1979) point out to three major weaknesses: first, since the register is voluntary there are a number of disabled people who are working but not registered and the employer is not entitled to include them in his 3% quota; second, the criteria for defining 'suitability' of the disabled applicant are not clear; third, there is no evidence that the quota scheme necessarily improves employment prospects for disabled people. In fact, the survey conducted by the Office of Population Censuses and Surveys shows that the number of employers failing to fulfil the quota has increased from 38.2% in 1966 to 63.2% in 1978 (JORDAN, 1979). A discussion document published by the Manpower Serices Commission (MANPOWER SERVICES COMMISSION, 1979) presents evidence from its own survey of employers showing that applying for permits to employ able-bodied workers has become a routine matter for many below-quota firms.

There is a general agreement that the quota system needs to be modified but that it should be retained. The National Fund for Research into Crippling Diseases published a report of the working party under Lord Snowden (THE FUND, 1975) which examines a number of issues involved in integrating the disabled. The report makes the following recommendations for improving the effectiveness of the quota system:

- local authorities and government departments should set an example for integrated employment

- the employer's view regarding the suitability of a disabled person for a particular job should not be regarded as conclusive; Disablement Resettlement Officers should be empowered to refer disputed cases to the district advisory committees
- differential weighting for quota purposes in relation to the severity of the handicap should be established.

JORDAN (1979) similarly advocates an improved quota system which should apply universally. He recommends a penalty payment of a levy by firms failing to comply with their statutory duty and suggests that the revenue thus obtained should be used to improve the employment opportunities for the disabled.

REHABILITATION AND TRAINING

The Employment Service Agency is the main organisation responsible for employment rehabilitation through its national network of 26 Employment Rehabilitation Centres. It should be noted that these centres do not offer training for skilled jobs; they are centres for assessment and rehabilitation. The length of courses varies, depending on the individual requirements, from a few weeks to six months. Employment Rehabilitation Centres organise their workshops in such a way as to simulate an industrial or commercial environment and rehabilitees are expected to keep the usual business hours. The aim of these courses is to enable a person to attend a training course elsewhere or to enable him to find a suitable employment.

Rehabilitation facilities are also provided by some local authorities, hospitals and by private employers. GREAVES AND MASSIE (1979) describe a scheme introduced by Vauxhall Motors, Luton, which shows the potential for an important role to be played by employers in rehabilitation of their employees. The Vauxhall Rehabilitation Centre was opened in 1946 with the aim to help Vauxhall employees who have suffered injuries resume work as soon as possible. Over 75% of the employees who benefit from the scheme are injured at places outside work. A worker attending the rehabilitation centre is paid the normal factory rate and the type of work he does is determined according to his injury and his ability. Once the worker is judged capable of returning to the factory he will either resume work in his previous capacity or, if his injury makes it impossible, he will be given another job. Some workers, due to severity of their injury, are not able to resume work in the main factory and in such cases they are sent to Vauxhall sheltered workshop where they can continue to earn income in spite if their low rate of productivity. GREAVES AND MASSIE suggest that large companies should be actively encouraged to examine such rehabilitation centres as the Vauxhall one and, whenever possible, follow Vauxhall's example. This subject is also raised by JORDAN (1979) who recommends improving in-firm training facilities for the disabled.

The effectiveness of rehabilitation and re-training centres has been examined by a number of authors. The Snowdon report (THE FUND, 1976) points out that much more needs to be done to ensure that the disabled person finds a job at the end of the rehabilitation and training period. This might involve better careers guidance and improved facilities for part-time study. Furthermore, the Snowden report recommends that in cases where a person becomes disabled after having been with the same employer for a reasonable period of time, the employer should be obliged to retain him in the same job or one which, after suitable re-training and rehabilitation, is comparable to it

Several studies mention the need to widen the scope of rehabilitation and re-training schemes so that clerical, commercial and professional occupations are not neglected (GREAVES AND MASSIE, 1979; JORDAN, 1979; KETTLE, 1975; TENNANT, 1977; FORD, 1977). Since the Employment Rehabilitation Centres are divided into two main sections, industrial and clerical, the assessment aims at manual or lower grade clerical jobs. GREAVES AND MASSIE suggest that special rehabilitation centres are established to assess the potential and the re-training needs of the professional disabled workers and other disabled people who have a high IQ. FORD describes how a rehabilitation service for the professionally unemployed or disabled could be absorbed into the existing framework. A substantial number of the professional client's needs are non-vocational and they might be almost entirely personal, involving self-development or self-knowledge objectives. FORD introduces a notion that rehabilitation should be recognised as having to do with personal development rather than detached assessment or passive exposure. He proposes a programme of talks or lectures followed by instructed self-help groups and a full battery of tests followed by explanation of results and their implications.

The special difficulties encountered by professionals who become disabled in adult life have been examined by KETTLE (1975) and TENNANT (1976). A survey carried out by KETTLE indicates two important problem areas: first, employers need to become more involved in the rehabilitation of their employees who become disabled; second, there is an urgent need for adequate rehabilitation within the existing system to cope with special problems of the disabled professionals (KETTLE, 1975).

The report by Sir Mark Tennant (TENNANT, 1976) indicates that it is easier for the disabled professional to find a job commensurate with his potentialities if he continues employment with the same employer. This could be explained in terms of personal and social obligation on the part of the employer and the sense of investment in skill and experience which should not be wasted. The report suggests that a liaison with the previous employer during the rehabilitation period might be worthy of a detailed study as it might play a significant role in the future employment prospects of the disabled professional. At present, the disabled professional seeking employment with a new employer uses the combined services of Professional and Executive Register and Disablement Resettlement Service. There is a serious weakness in this arrangment: first, the Professional and Executive Register has no specialised knowledge of disablement; second, the Disablement Resettlement Service has only a limited knowledge of professional and executive life and of various implications of disablement for this type of employment. The report recommends the development of a better service within these two organisations to deal with the employment problems of disabled professionals. Furthermore, it suggests that coaching in interview techniques and in writing job applications would be desirable since many disabled professionals find it difficult to talk or to write about their disability.

The preparation of rehabilitees for job interviews and applying for jobs is also discussed by GREAVES AND MASSIE (1979) who believe that this type of training is most useful and should become a common practice. The disabled person attending an interview is at a double disadavantage - not only is he likely to feel anxious like any other applicant in a similar situation, but he is also frequently faced with an employer who knows very little about his disability and consequently feels ill at ease. Video tapes provide an excellent aid in helping people to handle such situations and one Employment Rehabilitation Centre is already planning to introduce this technique.

Another innovation which could be useful in the rehabilitation process is an experimental job introduction scheme started in July 1977. This scheme is discussed by GREAVES AND MASSIE (1979) and in a document entitled

'Looking Forward' (DISABILITIES STUDY UNIT, 1979). The chief aim of the scheme is to encourage employers to give certain disabled people a trial period of employment. This is a selective scheme for those who might benefit most and for whom there is a prima facie prospect of a job becoming permanent. The length of the trial period is variable - 6 weeks in the majority of cases - and the employer receives a payment from the Employment Service Agency of £30 per week as a contribution towards the wages.

Another scheme, mentioned by GREAVES AND MASSIE (1979), is a job rehearsal scheme for people attending Employment Rehabilitation Centres, The participants in the scheme may work for an employer who does not pay them any wages. Instead, the trainee receives a training allowance from the Employment Service Agency. It is hoped that such schemes designed to introduce the employer and the disabled to each other might lead to a permanent employment.

TYPE OF EMPLOYMENT

A survey carried out on behalf of the Department of Health and Social Security in conjunction with other government departments (BUCKLE, 1971) found that the distribution of occupational status among impaired workers was not very different from the general population although a higher proportion of disabled workers were semi-unskilled workers. It should be noted that most workers in the sample surveyed became disabled after leaving school or after qualifying and after they had settled in a job. 42% of the respondents stated that disability forced them to take jobs where their qualifications or skills were not used.

A more recent survey (JORDAN, 1979) shows that 60% of the disabled have no qualifications or skills compared with 47% of the general population. This appears to reflect educational deficiency which, in turn, affects job mobility, promotion prospects and employment aspirations.

The nature of employment of the disabled has also been investigated by a survey carried out by Rotary Clubs (ROTARY INTERNATIONAL IN GREAT BRITAIN AND IRELAND, 1978). It shows that, despite notable exceptions, the disabled are mainly employed in repetitive, unskilled jobs. Unfortunately the survey does not provide information as to whether the respondents were employed in the same firm prior to their disablement and in what capacity. This type of information would be most useful as it might throw some light on the problem of re-training.

One particular study of a firm manufacturing electrical equipment (HANN, 1977) suggests that the type of employment open to the disabled can be varied provided the employer judges the employers strictly on merit. This firm employs the disabled in a wide range of jobs including a computer programmer, draughtsman, senior metallurgist, production foreman, assembler, etc.

In 1973 two researchers conducted a survey of 50 paraplegics living in Glasgow (JOHNSON AND JOHNSON, 1973). Before disablement the majority of the paraplegics were in paid employment. Most of the working group were manual workers but the effect of disablement on their pattern of employment has been considerable - leaving only 7 paraplegics working. The survey found that among the most frequently quoted reasons for unemployment were restrictions on movement; extra requirements for careful body management; lack of transport; lack of financial incentive.

A study of the employment problems of tetraplegics (GOLDING, NICHOLSON AND ROGERS, 1976) suggests potential sources of suitable work for tetraplegics which need not be limited to unskilled jobs. One such source is the computer industry, particularly in data processing and programming. This is an expanding industry where extra fringe benefits are often required to attract the highly mobile staff. Consequently, the managers approached in this study were keen to discuss the opportunities for tetraplegics who were more likely to remain in a local employment due to their restricted mobility. Other potential sources of employment for tetraplegics suggested in this study include the following:

- local government: at present poor at recruiting the severely disabled although a wide variety of suitable jobs is available
- education: tetraplegic teachers are already employed at all levels of the system. However, teacher training presents certain difficulties due to the training colleges being physically unsuitable for wheelchairs. Cooperation in providing the necessary adaptations is urgently needed
- the professions: training for law and accountancy is particularly easy but training for the medical professions presents serious problems mainly due to the inaccessible and awkward buildings
- Civil Service: this is more cooperative and adaptable in employing the disabled than local government or the professions
- general jobs: telephone sales, radio control operations, office work.

The great majority of disabled people are working in open employment, i.e. ordinary industrial and commercial firms, nationalised industries, civil service or similar organisations where they are employed in a variety of roles. For those who are unable to face the rigours of open employment the 1944 Act provides and alternative of sheltered employment which is a form of supported employment. The support can be organised in different ways. Most sheltered workshops qualify for a grant from Employment Service Agency to compensate for lower productivity. Workshops can also be owned by voluntary organisations, local authorities or government sponsored companies.

A study published by Personal Social Services Council (BRIDGE, 1977) quotes several case studies in sheltered employment but only one of those is relevant to the present review, the others dealing exclusively with mentally handicapped people. The relevant case study concerns a group called Kelvedon Programmers, formed at the Oakwood Further Education Centre of the Spastics Society. Kelvedon Programmers started by subcontracting programming work from the computer department of the Ford Motor Company and then expanded taking on work from a number of other customers. When this venture first started, four Oakwood residents successfully completed a programming course and eight years later, in 1976, they were still working in computing. One had left Kelvedon and was working as a freelance programmer; two were on computer science courses, one at a university, the other at a polytechnic; the fourth started employment with a major electronics company. The Kelvedon group, although small, has had its measure of success and it provides an example of a cooperation between disabled and able-bodied people working together on equal terms.

GREAVES AND MASSIE (1979) give a comprehensive account of sheltered employment facilities including those provided by Remploy Ltd. which employs the majority of disabled people who work in sheltered workshops. One case quoted by the two authors is of particular interest to the present review. This is the Papworth Village Settlement located in Cambridgeshire providing employment for over 200 disabled people. The settlement offers a variety of work facilities: light electrical work assembling parts for computers and electrical equipment: production of high class leather travel goods; coach building. Papworth is an interesting example of a sheltered workshop showing that severely disabled people can be employed in a variety of jobs producing high quality goods which can be sold at an economic price. Another such example is that of the Meadway Works sheltered workshops in Birmingham owned by the Spastics Society (GREAVES AND MASSIE, 1979). The disabled workers employed there assemble and manufacture high quality electrical or manually propelled wheelchairs and work on other engineering projects. It is important, as GREAVES AND MASSIE point out, that the type of work offered in sheltered workshops should be constantly examined in order to ensure that it is suitable for disabled workers.

WORK PERFORMANCE

A recently published review of research into the performance of disabled people at work (KETTLE, 1979) shows that there is factual evidence to prove that the work performance of disabled workers is by no means inferior to that of other workers. However, virtually all the publications cited in the review are American and, consequently, beyond the scope ot the present discussion which is concerned with the British experience.

The few British publications avilable emphasise the urgent need for research in this field. GREAVES AND MASSIE (1979) studied the possibilities for employment for disabled people and their findings show that all the firms they visited were satisfied with their disabled employees. In one case it was reported that disabled employees were more punctual and had lower absenteeism rate. Another firm found no difference in work performance between their disabled and other workers. None of the firms had been disappointed with their disabled staff. It should be noted, however, that as the two authors themselves point out, they only had access to firms which were sympathetic to their enquiry and that they were unable to interview employers reluctant to employ disabled people.

These findings are confirmed in a study of 299 tetraplegics (GOLDING, NICHOLSON AND ROGERS, 1976). It shows that on the whole the disabled employees keep the same working hours as other employees and absence for hospital treatment does not present any major problems and is readily tolerated by employers. Similarly, occasional lateness, mainly caused by prolonged morning toilet routine, is comparable with the lateness of able-bodied worker caused by transport difficulties. In all case the employers found the tetraplegic employees competent at their job.

The above study of tetraplegics also found that part-time work was at first welcome by some employers as giving them a chance to learn gradually about their disabled workers. Most part-time work later developed into full-time employment. Flexi-time, used by an increasing number of companies, especially in London, was found to help tetraplegics.

It appears that disabled workers frequently find it difficult to work normal working hours. According to the findings of the Office of Population Censuses and Surveys (JORDAN, 1979) 44% of the disabled believe that their hours of work are limited by their disability. In some cases it means that they are unable to work over-time and thus cannot increase their level of earnings. Another study (BUCKLE, 1971) found that disabled workers were more likely to work shorter hours (6% of disabled men compared with 1% of men in general population). One in five disabled workers said that they could not work too hard or that they got tired easily.

In a fairly recent study carried out by the British Epilepsy Association (MACINTYRE, 1976) information was collected from works doctors about workers suffering from epilepsy. According to the doctors the majority of epileptic workers managed to cope with their jobs with little or no difficulty. Furthermore their accident frequency rate was 0.006. It is interesting to compare this figure with figures from the British Chemical Industry quoted by KETTLE (1979). The average annual accident frequency rate of 29 companies employing over 1000 people was 1.92 which is much higher than the rate for epileptics mentioned above. This type of evidence helps to disprove the notion entertained by many employers that epileptics have high accident rates and, consequently, poor absence record.

EMPLOYERS' ATTITUDES

The employer's judgement regarding the possibility of employing a disabled applicant may be more or less well informed and there is certainly scope for trying to dispel prejudices and incorrect beliefs. However, this demands understanding of why people fail to get jobs which, in turn, requires a comprehensive study of employers' attitudes. Unfortunately, very little published material in this field is available in Britain.

An important contribution to this neglected area of research is provided by one study of employers' attitudes to the employment of the disabled (LYTH, 1973) in which 31 employers were interviewed and asked about their policy towards the employemnt of the disabled. The most frequent response was that each case was considered on its merits. Other responses included references to the law (the quota system) as the main guidelines; social reasons; and finally there were 2 firms which refused to employ the disabled at all due to an unfortunate previous experience. The respondents were also asked to express their opinions about their disabled workers. Poor work performance was the reason given by 10 employers for their choice of the least satisfactory disabled employee. In 3 firms even the most successful disabled person was rated as worse than average at his job and in the majority of cases only the most successful disabled employees were considered better than the average able-bodied employee. Although the judgements expressed by the employers were by definition subjective and there was no independent assessment of their disabled employees' work performance, this evidence suggests that how well a job is actually done is of primary importance in the successful industrial rehabilitation of disabled people.

The study of tetraplegics mentioned in the previous section of this review (GOLDING, NICHOLSON AND ROGERS, 1976) shows that all employers surveyed found tetraplegics excellent employees. In contrast, charitable organisations reported that large numbers of disabled people with mixed abilities working together were less usccessful as employees. Among employers' complaints about tetraplegics the most frequently cited were over-eagerness on first appointment coupled with clumsy treatment of other staff and embarassing diligence. Employers found that adjustments to large meetings and work schedules necessitated by the disabled employees could be very difficult 'but still worth it'.

The Rotary Club survey (ROTARY INTERNATIONAL OF GREAT BRITAIN AND IRELAND, 1970) found evidence of good will towards disabled workers shown by employers, supervisors and fellow-workers. Only in a very limited number of cases was there any evidence of a certain degree of resentment or lack of sympathy. Some disabled workers were said to have 'a chip on the shoulder' which gave them self-made difficulties.

It appears that large firms (employing 5000 people or more) and small firms (employing about 1300 people) are more likely to employ disabled people and with more satisfactory results. The study of disabled professionals and executives (TENNANT, 1975) found that large organisations faced fewer difficulties in employing disabled people since their size and composition provided greater flexibility and room for manoeuvre. This finding is confirmed by GREAVES AND MASSIE (1979) who quote an example of one large retail organisation as having a defined policy of employing epilactics.

Another example is that of a large organisation which has made its new offices completely accessible to wheelchairs and provided other facilities for disabled workers. Large firms are more likely to employ skilled personnel staff capable of dealing with the special problems of disabled employees and in small firms the owner is in close contact with his employees and he can take a direct interest in his disabled workers. None of these advantages exists in medium size firms which are too small to employ expert personnel and too large to offer the benefits of a 'family atmosphere' to disabled employees.

WORK-PLACE CONDITIONS

Capital grants are provided under the 1944 Act for adapting premises or equipment to the needs of disabled employees. However, according to GREAVES AND MASSIE (1979) who investigated this issue, the employers' response to this scheme has been very disappointing. Thus by January 1979 grants were distributed for 14 adaptations at a total cost of only £7224. It appears that access is a serious and growing problem in relation to employment of the disabled and the porblem is made worse by the over-cautious attitude of employers with regard to absolute work safety. As a result, wheelchair-bound people are prevented from getting jobs, their choice of work is limited and, in some cases, their career development is severely restricted. According to GREAVES AND MASSIE the adverse effects on employment prospects of the disabled caused by the lack of access and by the unrealistic implementation of fire precautions will become increasingly acute.

The study of tetraplegics (GOLDING, NICHOLSON AND ROGERS, 1976) which examines working conditions in more detail shows them to be so variable that any generalisations become very difficult. Among the examples of adaptations quoted in the study are: help available to lift wheelchairs in old buildings without proper access; meetings of executives arranged in the tetraplegic employee's office; a laboratory re-designed by a tetraplegic design engineer in order to bring all the equipment to the right height and to provide suitable levers; work benches raised on blocks. On the whole few adaptations were reported necessary to accommodate tetraplegics and these were achieved through simple adjustments (e.g. changes in the height of the equipment or widened doors). None of the employers complained of being inconvenienced. In charitable or similarly subsidised enterprises great trouble was taken to adapt work and work-place to the needs of the severely disabled. This included ample provision for accommodation of wheelchairs and generous working hours concessions. One serious drawback was that the disabled employed in these enterprises were involved in a simple, routine work affording no job satisfaction.

One interesting account of adaptation of the work-place to the needs of physically disabled people is based on personal experience of the two authors of 'Get Yourself Going' (MORA AND THRIFT, 1979). The aim of this book is to show the employers and the disabled employees how to use modern office equipment for the needs of the disabled. It explains in great detail how commercially available office equipment can fulfil the ergonomic needs of the physically handicapped worker at a minimum cost. Modular systems of office furnishing, not specifically designed for a disabled user, are suitable for his needs mainly because of their flexibility. A working area can be created to suit the individual requirements of the occupant simply by using such features as multiple tier revolving files, multiple shallow drawers, typewriters with automatic paper insertion and control, etc.

One other study which investigated the work-place conditions is the Rotary Club survey (ROTARY INTERNATIONAL IN GREAT BRITAIN AND IRELAND, 1970). No detailed findings are reported but the general conclusion of the survey is that the working conditions are far from satisfactory and that the main obstacle is transport from and within the work-place.

SALARIES AND PROMOTION PROSPECTS

According to GREAVES AND MASSIE (1979) there is no evidence that disabled workers in open industry are not paid the normal rates for the job. However, one should bear in mind the difference between the wage rates and the actual earnings in the manufacturing industry, the latter being of more importance to the average worker since it includes extra pay for overtime. Severely disabled workers who tire more easily are penalised in this respect since they are unable to work much overtime. This important fact is also stressed by other authors. The Office of Population Censuses and Surveys' findings show that 44% of the impaired found their hours of work limited by their disability and this inability to work overtime affected their level of earnings (JORDAN, 1979). This is again confirmed by another study (BUCKLE, 1971) which shows that difficulty in doing shift work is quoted by the disabled as the main reason for loss in earnings and the lack of any real chance of promotion.

The incentive to work is of equal importance to the disabled and non-disabled workers. Both groups want a reasonable wage commensurate with their skills, equal chances of promotion and a reasonable choice of jobs in higher paid employamnt. GREAVES AND MASSIE (1979) draw our attention to the importance of the motivation of disabled workers. These workers experience more effort and anxiety in getting to and from work and in trying to match the work performance of their able-bodied colleagues. It is therefore most important that the financial rewards should compare favourably with the concessions available only to disabled people who do not work. There is a general consensus among researchers that disabled workers appear to be largely employed in low paid jobs and that they do not get promoted. This creates an urgent need for some research to clarify the situation and find the reasons for it.

The above discussion refers to wages in open industry but as GREAVES AND MASSIE (1979) point out the wages in sheltered workshops are always low compared with national averages and in some workshops they are exceedingly low. This creates a paradoxical situation whereby disabled people working in sheltered workshops are being deprived of benefits available to other, non-working disabled people simply because they are working. Thus instead of being justly rewarded for the work they do, they are being penalised.

The issue of promotion is seldom discussed in the literature concerned with the employment of the disabled. GREAVES AND MASSIE (1979) interviewed a number of wheelchair-bound people who believed that they failed to get promotion on the grounds of their disability. However, as the two authors point out, many disabled people are barred from promotion because of the type of work in which they find themselves. For example, the Association of Disabled Professionals has reasons to believe that many of their members experience loss of status and income following their disability but this issue requires more research.

CONCLUSION

Employment disadvantage of the disabled stems from a number of economic problems and from a whole range of personal and social disadvantages which form the basis for predicting the economic problems. This issue is discussed thoroughly in a document published by Personal Social Services Council (BRIDGE, 1977) which presents a list of factors relevant to the employment of the disabled. According to Bridge the main factors are as follows:

- experience, skills and learning: these are obviously important prerequisites for entering into any employment. Since the disabled might be at a disadvantage in this respect it is the responsibility of the employment services to ensure that disabled people are adequately prepared for open employment. This may be accomplished through training in particular skills; introduction or re-introduction into the work experience; ensuring that continuity of capacities and opportunities is preserved in cases of temporary inability to work;

- social integration: employers may be apprehensive about the ability of the disabled person to relate to other workers. Furthermore, it is difficult to predict the reaction of a group to a particular person and the effect it might have on a group performance at work. If there are any real, specific obstacles to employability, the disabled should be provided with medical, social and other assistance to overcome these difficulties;

- manageability: employers may be apprehensive about the lack of sanctions in the event of some employees proving difficult to manage. There is evidence that sometimes employers reject well-qualified disabled applicants simply because they are afraid that it might prove difficult to dismiss them in the event of unsatisfactory work performance;

- motivation: it is not enough to be sufficiently motivated to seek employment; a certain degree of continuing motivation is required to retain the job. This might place greater demands on the disabled than on the able-bodied workers for a number of reasons mentioned in the earlier parts of the present review;

- attendance: adverse expectations with regard to recurring absences from work are frequently applied to the disabled even if there is evidence to the contrary. Introduction of flexi-time has proved beneficial to disabled workers in this respect;

- turnover: there are obvious disadvantages in employing people who are thought unlikely to continue in employment for long. This consideration might place the disabled in an advantageous position since, as mentioned earlier in the present review, there is evidence that they are less likely to change jobs due to their low mobility;

- physical capacities: some jobs might require specific physical capacities and job re-definition, adaptation or additional equipment might be needed if they are to be done by people lacking some of these capacities.

Specific measures must be taken in order to reduce the employment disadavantage faced by the disabled. The general consensus appears to be in favour of a combination of compulsory measures such as quotas and equal rights legislation and methods aiming at voluntary changes involving educating the employers with regard to the employability of the disabled, demonstration projects and provision of guarantees to the employers. The Snowden report on integrating the disabled (NATIONAL FUND FOR RESEARCH INTO CRIPPLING DISEASES, 1976) suggests a number of financial incentives to the employers. These include capital grants to modify premises and equipment; relief of National Insurance contributions in respect of disabled employees; investment allowances in respect of architectural and other improvements; waiver of placement fees paid by the employer with regard to a disabled person placed through the services of the Professional and Executive Register; grants for training the disabled for specific jobs and training others to help them and to carry out job analysis research.

The Snowden report also recommends the introduction of a disablement employment tax which should be levied on all employers and paid into a Disablement Employment Fund to which the government would also contribute. These funds would be used to compensate employers for costs incurred in employing the disabled. Such a scheme would have the advantage over direct subsidies in that the employer would be able to claim from the fund the total cost incurred . The Disablement Employment Tax would have to be set high enough to provide a genuine incentive for the employers to employ disabled people and the quota system would be retained in a modified form to provide a safeguard.

The need to eliminate disincentives to the disabled worker, already discussed in the present review, is also emphasised in the Snowden report. It recommends replacing the present 'all-or-nothing' system with a provision of proper compensation for a partial loss of earning capacity arising from severe disability. It suggests that the United Kingdom should follow the example of all Scandinavian and EEC countries where partial pension are payable for partial incapacity thus removing the financial disadvantage experienced at present by disabled people taking up employment.

The final conclusion emerging from the present review of the British literature on the employment of the physically disabled is that there is still little basic knowledge regarding attitudes towards disabled people at work, work performance and work motivation of the disabled and equally little is known of the attitudes of disabled people themselves. More basic research is required in these areas.

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